

FURTHER NOTES ON AUSTRALIAN COLEOPTERA,  
WITH DESCRIPTIONS OF NEW GENERA AND  
SPECIES.

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[Read April 7, 1891.]

IX.

CARABIDÆ.

HYPHARPAX.

*H. Sloanei*, sp. nov. Minus elongatus; viridi-æneus; antennis (his apicem versus vix infuscatis), palpis, mandibulis (his basi apiceque piceis), pedibus (femoribus leviter infuscatis), elytrorum margine terui, et abdominis apice, testaceis; prothorace fortiter transverso, postice quam antice vix latiori, postice utrinque foveolato, foveolis vix perspicue punctulatis, lateribus modice rotundatis, angulis posticis obtusis vix rotundatis, latitudine majori vix ante medium posita; elytris fortiter striatis, interstitiis subconvexis postice haud magis elevatis, 3° prope apicem puncto setifero instructo.

Maris tarsis anterioribus 4 fortiter dilatatis, intermediorum articulo 1° subtus simplici; femoribus posticis subtus late angulatis (vix dentatis); tibiis posticis leviter arcuatis. Long, 3 l.; lat.  $1\frac{1}{10}$  l.

From the other species of *Hypharpax*, not greatly larger than it, the present species may be known by the combination of the following characters:—Legs entirely pallid (the femora only a little brownish), elytra strongly striated (almost as strongly as in *H. ranula*, Cast.); anterior 4 tarsi of male very strongly dilated (about as strongly as in *H. inornatus*, Germ.); posterior femora of male only widely and obtusely angulated in place of the strong tooth found in *H. inornatus*, *vilis*, &c.; posterior tibiæ of male regularly and only slightly curved, not bent inwards strongly near the apex. Perhaps the strong striation of the elytra is the best single character. The prothorax is almost as in *H. inornatus*, Germ., as also are the hind tarsi.

N.S. Wales; taken near Mulwala by Mr. T. G. Sloane.

DICROCHILE.

*D. ventralis*, sp. nov. Sat elongata; minus convexa; sat nitida (mas) vel subopaca (femina); nigra vix ænescens; antennis palpis tarsisque plus minus picescentibus; prothorace quam

longiori vix tertia parte latiori, quam caput vix latiori, canaliculato, obscure transversim rugato, lateribus minus late reflexis ante medium subangulatis ante angulos posticos sinuatis, his obtusis sat distinctis; elytris striatis, interstitiis sat planis (nihilominus  $3^{\circ}$   $5^{\circ}$   $7^{\circ}$  que apicem versus carinatis,  $3^{\circ}$  mox ante apicem externe abrupte angulatim dilatato),  $3^{\circ}$  punctis 2 vel 3 instructo.

Maris segmentis ventralibus 3-5 in medio sat crasse transversim rugatis vel squamoso-punctulatis et setis pallidis obsitis. Long., 7 l.; lat., 3 l.

The sides of the prothorax very distinctly sinuate behind (and angular before) the middle, together with the peculiar sculpture of the elytral interstices posteriorly, render this a very distinct species. The prothorax is scarcely more than half as wide as the elytra. The peculiar external angulation of the hind part of the third elytral interstice is best observed by looking along the elytra with the head of the insect directed towards the observer when it is very conspicuous. Compared with *D. Goryi*, Boisd. (apart from colour and the very different shape and proportions of the prothorax), this species has the prothorax obscurely roughened with fine puncturation (where in *Goryi* it is strongly rugulose), much less widely margined, &c.; the elytral interstices much less convex and very differently formed at the apex; also the ventral segments of the male much less nitid and having all the middle part sculptured and setiferous (in *Goryi* there is an irregular line of setiferous rugulosities on either side of the middle line). Of other previously described species *gigas*, Cast., *punctipennis*, Cast., and *quadricollis*, Cast., are *inter alia* much larger, *punctato-striata*, Cast., has elytral striæ strongly punctured, *montana*, Cast., has the prothorax "short and transverse," *minuta*, Cast., is much smaller than the present species, and *brevicollis*, Chaud., has the prothorax even more transverse than *D. Goryi*.

S.A.; near Port Lincoln.

## HYDROPHILIDÆ.

### PARACYMUS.

*P. nigerrimus*, sp. nov. Breviter ovalis; convexus; nitidus; niger, nullo modo metallescens; antennis (clava excepta) prothoracis lateribus pedibus elytrorumque apice rufescentibus; corpore supra sublævi-elytris sub lente forti vix perspicue punctulatis. Long.,  $1\frac{1}{2}$  l.; lat.,  $\frac{3}{5}$  l.

The complete absence of sculpture—except the sutural stria of the elytra which is obsolete in front—will distinguish this species from all its known allies. Unfortunately, I have not been able

to spare a specimen for dissection, without which it is impossible to be sure of all the structural characters, but I think there is no doubt of its being closely allied to *Paracynus* (*Paranacana*) *Lindi*, Blackb., and *sublineatus*, Blackb., of which it has quite the facies, and the structural characters so far as I have been able to examine them.

Mountains of Victoria.

#### LACCOBIUS.

The following species may, I think, be attributed to this genus (not previously recorded as Australian so far as I know), although they differ from the European members of it in having maxillary palpi somewhat more robust, the labrum shorter, the mesosternum tuberculated (not sharply carinated) in front of the middle coxæ, and the tibiæ set with short stiff erect bristles. In general appearance, sculpture, &c., they resemble the European *L. minutus*, Linn., but are a little more elongate in form. The distinctive characters mentioned above might justify a new generic name, but I am satisfied that for the present it is better to minimise genera, and so should be disposed to attribute to *Laccobius* all species belonging to *Hydrobiides* (Lacordaire), and having eight-jointed antennæ, tibiæ devoid of swimming-hairs, prothorax and ventral segments of the *Hydrobius*-type, and facies style of sculpture, &c., resembling the European *Laccobii*. *Hydatotrepis* differs *inter alia* in having the last joint of the maxillary palpi not longer than the penultimate, but in some characters comes near *Laccobius*.

*L. montanus*, sp. nov. Sat late ovalis; sat nitidus; brunneo-piceus; antennis (clava excepta), palpis (apice summo excepto), clypeo, prothorace, pedibusque dilutioribus vel testaceis; supra crebre æqualiter sat aspere punctulatus; elytris leviter striatis; prothorace fortiter transverso, antice fortiter emarginato, lateribus sub-diaphanis, angulis omnibus rotundatis. Long.,  $1\frac{3}{4}$  l.; lat.,  $\frac{2}{3}$  l.

The texture of the lateral portions of the prothorax is so thin that these parts are transparent; the prothorax is very much wider across the base than in front (though the hind angles are so entirely rounded off that there is no clear distinction between the sides and the base; the sides and apex of the elytra are paler in colour than the disc. Compared with the European *L. minutus*, Linn., this species is throughout much more closely and evenly punctured, the puncturation being moreover scarcely so strong as that on the prothorax of *L. minutus*.

Victorian mountains.

*L. australis*, sp. nov. Præcedenti affinis; differt statura minore, prothorace in medio infuscato, hoc et capite multo sparsius

nec aspere punctulatis, elytris magis perspicue striatis, striis quam interstitia magis fortiter punctulatis. Long.,  $1\frac{2}{3}$  l.; lat.,  $\frac{7}{10}$  l.

I have no doubt this is a good species, although very close to the preceding. In *L. montanus* the puncturation of the whole upper surface is very equal and quite asperate, being so evenly distributed on the elytra as to include the punctures of the striae, and make these latter quite confused with those of the interstices. In the present species the puncturation of the head and prothorax (especially the latter) is much finer and less close than that of the elytra, while on the elytra the puncturation of the striae is quite noticeably distinct from that of the general surface. Victoria; Owens River.

## CERCYON.

*C. flavipes*, Fab. I have recently taken this species (at any rate, I cannot find any character to justify regarding it as distinct) at an elevation of about 5,000 feet above the sea, on the Victorian Mountains.

## PAUSSIDÆ.

## PAUSSUS.

*P. australis*. Sat angustus; sat opacus; obscure rugulose (præsertim in elytris) punctulatus; ferrugineo-rufus; elytris fascia lata nigra ornatis; antennarum articulo 1<sup>o</sup> elongato-piriformi, 2<sup>o</sup> quam 1<sup>us</sup> duplo longiori et duplo latiori difforme (ad basin truncato, ad apicem rotundato, supra in parte basali concavo in parte apicali fortiter convexo); prothorace in medio valde strangulato, parte antica fortiter transversa postice bifida, parte postica minus fortiter transversa supra profunde late longitudinaliter sulcata. Long., 2 l.; lat.,  $\frac{7}{10}$  l.

The dark fascia on the elytra is at its widest near the lateral margin which it does not quite reach; thence it narrows a little towards the suture, where its width is nearly half the length of the whole suture, its hind extremity being distant from the apex about a fifth of the length of the whole suture. This species is interesting as being the first genuine *Paussus* recorded from Australia.

Queensland; Mt. Bartle Frere: presented to me by C. French, Esq.

## STAPHYLINIDÆ.

## TACHINUS.

*T. novitius*, sp. nov. Sat nitidus; ferrugineus; antennis (apicem versus) elytris (parte postica præsertim) meso- et meta-sternis abdomineque infuscatis; elytris prothorace fere duplo longioribus; capite prothoraceque levibus; elytris sparsim sat subtiliter, abdomine crebre minus subtiliter, punctulatis. Long.,  $2\frac{1}{3}$  l.; lat.,  $\frac{4}{5}$  l.

In the male the anterior tarsi are rather strongly dilated, on the upper surface the apical segment of the hind body ends in four sharp teeth, and on the under surface the penultimate segment of the hind body is sinuous or feebly emarginate in the middle and the apical segment is very deeply incised (the middle of the incision being convex hindward), both these segments having a conspicuous pencil of long ciliae on either side.

I hesitate a little as to whether this species should be referred to *Tachinus* or *Tachinoderus*. The principal distinctions between the two (I know *Tachinoderus* only by description) appears to be that the latter has the mesosternum carinate and the hind body margined only at the base, while the mesosternum of the former is simple and the entire hind body strongly margined. In the present insect the mesosternum is not quite so evenly rounded as in the European *Tachini*, but certainly cannot be called carinate, and the hind body has an entire margin, but it is very much narrower than in the European *Tachini*. The mouth organs seem to agree in all respects with those of *Tachinus*; these, however, are described as being similar in *Tachinoderus* also.

In order to compare this species with some well-known one, I place it beside a specimen of the European *T. marginellus*, Fab. (which Mr. Olliffe reports from Sydney; probably introduced), and find that besides the structural distinctions mentioned above, it differs in its elytra being somewhat longer in proportion, its prothorax and head almost levigate (under a high power some sparse very fine puncturation can be detected), its elytra with puncturation much more sparse and feebly impressed with a longitudinal depression on either side of the suture, making the latter appear carinate, and with the apex evidently more rounded, and the puncturation of its hind body decidedly stronger with a more or less longitudinal arrangement giving the appearance somewhat of longitudinal wrinkles.

Mountains of Victoria; a single example imbedded in snow.

#### HETEROTHOPS.

*H. taurus*, Blackb. I find that I was in error in referring this species to *Heterothops*. An examination of its prothoracic stigmata has satisfied me that it is a *Quedius*, and should stand near *Q. hybridus*, Er. The short acutely-pointed apical joint of the maxillary palpi misled me, but now, knowing the species to be a *Quedius*, I can see that even those organs are not really inconsistent. From *Q. hybridus* it may be distinguished *inter alia* by its antennae entirely red.

#### QUEDIUS.

*Q. cuprinus*, Fauv. (var.? *Baldiensis*). Sat dense subtiliter fulvo-pubescent; piceus; antennis basi et apice, ore, pedi-

busque testaceis: elytris subcæneis, basi suturaque obscure testaceis; abdomine subirideo, apice cupreo-testaceo; antennis sat robustis, articulis nullis transversis; capite elongato angusto subparallelo, oculis parvis vix convexis; prothorace quam longiori vix latiori, antice fortiter angustato, angulis posticis cum basi omnino rotundatis, puncturis usitatis notatis; scutello elytrisque (his prothorace vix longioribus) leviter squamose sat crebre, abdomine sparsim crassius, punctulatis. Long.,  $2\frac{1}{5}$  l.; lat.,  $\frac{3}{5}$  l. (vix).

In M. Fauvel's tabulation of the Australian *Quedii* (Ann. Mus. Gen., 1877, p. 268) the present species would fall under "B" (along with *Q. æneus* and *cuprinus*) on account of the narrow elongate form of its head. It is much smaller than either of those species, and *inter alia* differs also from the former of them by the sparse puncturation of its hind body, and from the latter by the testaceous apical joints of its antennæ and the rounded-off hind angles of its prothorax. It is to be noted that the apical joint of the maxillary palpi in this species is slender, very acute at the apex, and much longer than the penultimate joint. In spite of these differences, however, it seems to me not improbable that this is a small Alpine var. of *Q. cuprinus*, and I have given expression to this opinion by recording it as above.

Mountains of Victoria; a single example in moss at an elevation of about 5,000 feet above the sea.

#### HYPEROMMA.

During a recent visit to the Victorian Alps I was fortunate in securing two examples (male and female), which evidently belong to this remarkable genus (previously known only, I believe, by a unique male example from King George's Sound), and which M. Fauvel describes as sharing with only two other genera of *Staphylinidæ* the singular character of having the eyes placed on the upper surface of the head. I cannot doubt that these two examples are identical specifically, although the differences (all sexual, I believe) are considerable, and I am not absolutely certain that they were taken in company. The species seems to be extremely close to the typical one (*H. lacertinum*, Fvl.), but the sexual characters of the male forbid its being regarded as identical unless on the supposition that M. Fauvel was mistaken as to the sex of the specimen he described. This, however, appears to me sufficiently probable to render it inexpedient to give a distinctive name to the species before me, and I shall therefore offer the following as probably merely a correction of the sexual characters assigned to M. Fauvel's species. I cannot find any tangible specific character in which the insects before me do not satisfactorily agree with the very full and clearly-expressed description

of *H. lacertinum*, although the colour is not quite identical. M. Fauvel says (Ann. Mus. Gen., 1878, p. 68), "obscure rubrum, abdomine piceo." In one of my examples the head is nearly black, while the prothorax and elytra are reddish; in the other the head and elytra are red, while the prothorax is nearly black; but I do not attach any importance to these differences.

*H. lacertinum*, Fauv.? Mas. Capite latiori; tarsis anticis *L* fortiter dilatatis: segmento ventrali apicali profunde triangulariter anguste inciso, penultimo in medio profunde subrotundatim foveato; supra segmentis 2-4 in medio longitudinaliter leviter canaliculato, segmento apicali postice sat angustato.

Femina. Capite minus lato; tarsis anticis vix dilatatis; segmento ventrali apicali postice sat angustato fere ut maris inciso, penultimo simplici; supra segmentis haud canaliculatis, segmento apicali postice sat lato.

#### LATHROBIUM.

*L. Victoriense*, sp. nov. Depressum; sat robustum; sat nitidum; parce pilosum; piceo-rufum; abdomine (apice excepto) obscuriori, antennis palpis elytris pedibusque testaceis; capite a basi antrorsum angustato, quam prothorax haud latiori, sat fortiter sat sparsim (postice et latera versus magis crebre) punctulato; prothorace quam latiori parum longiori, postice haud angustato, utrinque sat fortiter minus crebre punctulato, angulis omnibus sat rotundatis, lateribus subconcavis; elytris prothorace sat latioribus, tertia parte longioribus, leviter obscure punctulato-striatis; abdomine crebre subtilissime (apicem versus minus crebre) punctulato; antennis elongatis. Long.,  $2\frac{3}{8}$  l.; lat.,  $\frac{1}{2}$  l.

This species is no doubt near *L. gratellum*, Fvl., described on a unique male from Sydney. Even if the insect before me should prove to be the female of that species, it is sufficiently remarkable in colour to be regarded as an Alpine form deserving a name; it is not likely, however, that such is the case, for, apart from colour, it differs in the head being narrower as compared with the prothorax, and triangular rather than quadrate; in the prothorax not being narrowed hindward (except, of course, close to the base, where the sides round off into the base), and I should judge in the stronger puncturation of the prothorax, which in *gratellum* seems to be finer than that of the head; whereas in the example before me the puncturation of the head and prothorax seems to be very similar in character. I hardly know where to place the present species in M. Fauvel's tabulation of the Australian *Lathrobia* (Ann. Mus. Gen., 1877 and 1878), as its tarsal structure would associate it with the group called "I," while all

the species with the head at its widest close to the base fall in the group called "II."

Mountains of Victoria.

PÆDERUS.

*P. Meyricki*, spec. nov. Apteris; nullo modo parallelus; niger; prothorace rufo, elytris cyaneis; oculis parvis; elytris basin versus angustatis, prothorace haud longioribus; abdomine retrorsum sat dilatato; cætera fere ut *P. cruenticollis*, Germ. Long.,  $3\frac{4}{5}$  l.; lat.,  $\frac{4}{5}$  l.

The insect is at its widest across the hind body. The smallness of the eyes will at once separate it from the various forms of *P. cruenticollis*; the difference of size may be stated thus—in *cruenticollis* the hindmost point of the eye is about equidistant between the front of the same and the point where the lateral margin (or base) of the head is in contact with the neck, while in the present species the hindmost point of the eye is very distinctly nearer to the same than to the neck. I am a little doubtful whether this may not be the apterous insect which M. Fauvel (Ann. Mus. Gen., 1878, p. 516) mentions as a var. of *cruenticollis*, but if so I think that learned entomologist must have overlooked the difference in the size of the eye.

W. Australia; taken in 1886 by Mr. Meyrick.

*P. cruenticollis*, Germ. In November last year I found this species in countless thousands crawling over the snow on some of the highest peaks of the Australian Alps.

LITHOCHARIS.

*L. varicornis*, sp. nov. Sat robusta; parallela; pilis erectis sparsim vestita; minus nitida; picea, elytrorum sutura rufescenti, antennarum basi et apice prothorace abdominis apice pedibusque rufis; crebre subtilissime punctulata; elytris prothorace vix longioribus. Long.,  $1\frac{4}{5}$  l.; lat.,  $\frac{3}{10}$  l.

Not unlike the European *L. brunnea*, Er., in build, but with very much finer and closer puncturation and somewhat longer elytra; the head is shorter than in that species, being a little shorter than the prothorax. Joints 3—7 of the antennæ are nearly black. The short series before me appears to be of one sex only—female.

Victorian Alps; among dead leaves.

SCOPÆUS.

*S. ruficollis*, Fvl. This is really an undescribed species, as its author merely points out in what respects it differs from the European *S. Erichsoni*, Kolen. I have a *Scopæus* from the Alpine district of Victoria which may be it, or may not—the latter is more probable, since Queensland is said to be the habitat

of *S. ruficollis*; but it is impossible to be certain on the point. The description, however, is so deplorably useless that I think something will be gained by this Victorian form being described, even at the risk of its proving, sooner or later, to be identical with the Queensland one; I am unable to specify any very precise difference between the two forms, except that the specimen before me is a little smaller than *S. ruficollis* is stated to be, and that the elytra do not seem to be "shorter than those of *S. Erichsoni*," which (according to Dr. Kraatz) are "not quite a third longer than the prothorax." I do not possess a type of *S. Erichsoni*, the habitat of which is thus stated by Dr. Kraatz, "(Occurs) rarely in Central and Southern Germany." Some named forms occurring in France and Italy are recorded by Dr. Kraatz as varieties of *Erichsoni*.

*S. dubius*, sp. nov. Subnitidus; minus depressus; pube subtilissima vestitus; piceus, antennis prothorace abdominis apice elytrisq̄e obscure rufis (his apicem versus dilutioribus), pedibus testaceis; alutaceus, vix manifeste punctulatus; capite quadrato, prothorace latiori; hoc oblongo, basi manifeste biimpresso, supra linea mediana obsoleta sat nitida instructo; elytris prothorace latioribus, tertia parte longioribus. Long.,  $1\frac{3}{5}$  l.; lat.,  $\frac{3}{10}$  l.

That part of the head which would be cut off behind a straight line passing across the front of the eyes is as nearly as possible an exact square—though with the angles of the said square rounded. None of the joints of the antennæ are transverse.

Besides *S. ruficollis*, Fvl., *S. digitalis*, Fvl. and *latebricola*, Blackb. have been described from Australia; of these the former has blackish or piceous tibiæ, and the latter is a smaller and less nitid insect with a longer head, &c.

*S. obscuripennis*, sp. nov. Minus nitidus; minus depressus; pube sat subtili vestitus; piceus, antennis palpis prothorace abdominis apice elytrorum apice pedibusque plus minus rufis vel rufescentibus; crebre subtilissime fere asperatim punctulatus; capite sat quadrato, quam prothorax parum latiori; hoc oblongo, basi subfortiter biimpresso, inter impressiones fere carinato, linea mediana elevata haud levi vix manifeste notato; elytris prothorace parum latioribus, hoc nullo modo longioribus. Long.,  $1\frac{3}{5}$  l.; lat.,  $\frac{3}{10}$  l. (vix).

Very distinct from the preceding, on account of its much shorter elytra and decidedly more defined puncturation; the antennæ and tarsi, moreover, seem to be a little stouter, and the general appearance is duller and more obscure. The colours vary a little, the lighter parts in some examples being more decidedly red than in other examples; in some the elytra are of a nearly

uniform dark-brown tint, while in others they have a wider and rather conspicuous dark-red hind border; the distinctness of the red margin of the elytra usually seems to vary according to the light in which the specimen is held. The legs are of a pale-brown colour (very different from the decided testaceous tone of the same in *S. dubius*), the femora sometimes more or less infuscate. In the male the third ventral segment is a little flattened in the middle of its hinder part, the fourth bears a semicircular fovea, the fifth is widely and shallowly concave in its whole length, and the sixth is widely and sinuately emarginate behind.

The present species would seem to differ from *S. ruficollis*, Fvl., in having shorter elytra, and probably in various other characters. From *S. digitalis*, Fvl., it appears to differ *inter alia* by its tibiæ being of uniformly light colour. *S. latebricola*, Blackb., is a smaller and narrower insect\* with longer elytra.

Victoria; near Wandiligong, among dead leaves.

#### DOMENE.

I am perhaps running some risk in referring the following species to this genus, as I have not seen M. Fauvel's diagnosis of its characters,—but from its place in that learned author's tabulation of the Australian *Poderid* genera and from references to *Domene* in other memoirs, as well as from the close resemblance of this insect to *D. Australiae* as described by M. Fauvel, I think I am not far wrong; at any rate there is no other genus known as Australian to which the present species can be referred. Having only a single specimen, I have been unable to examine its mouth organs fully; but the following are its principal characters (some of which may be sexual) as far as they can be seen without dissection:—antennæ short, stout, of the *Lathrobium* type; head and prothorax almost as in *Scopæus*; anterior femora armed with a distinct (though not strongly developed) tooth beneath; front tibiæ with their upper portion compressed and dilated beneath into a large obtuse tooth, the lower portion slender; anterior tarsi not dilated; posterior rather short, the basal two joints equal or nearly so, the third a little shorter, the fifth shorter than the preceding four together.

The shape of the front tibiæ is very peculiar, and I should hesitate much (on account of this character not being mentioned in M. Fauvel's tabulation) to refer the specimen before me to *Domene* were it not for a note in Dr. Sharp's memoirs on New Zealand

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\* The measurement of this species, as of others described in the same memoir (Trans. Roy. Soc., S.A., 1887) was unfortunately taken with a millimetre measure which I afterwards discovered to be slightly inaccurate, or rather not in accordance with the theory of a millimetre equalling half a line. The length of *S. latebricola* is  $1\frac{1}{3}$  l.

*Coleoptera*, in which he distinguishes a genus of *Pæderidae* from *Domene inter alia* by its front tibiæ being "almost simple."

The genus *Domene* is characterised in M. Fauvel's *Fn. Gall.-Rhén.*, vol. iii., p. 305,—a work to which I do not know how to procure access.

*D. (?) Torrensensis*, sp. nov. Tota pallide ferruginea; pedibus paullo dilutioribus; capite prothoraceque confertim subtilissime (illo subaspere), elytris vix minus confertim minus subtiliter, abdomine fere ut caput, punctulatis; prothorace linea mediana longitudinali tenui notato, hac postice sat manifeste elevata antice subobsoleta; elytris prothorace paullo longioribus. Long.,  $2\frac{2}{3}$  l.; lat.,  $\frac{2}{3}$  l. (vix).

The head and prothorax bear a system of very faintly impressed and very inconspicuous punctures larger than and additional to the system of very fine close puncturation mentioned above. The antennæ (set back) would reach quite to (but scarcely beyond) the base of the prothorax. The head and elytra are of about equal width, the prothorax being narrower.

This species seems to differ from *D. Australiæ*, Fvl., *inter alia* in being smaller with the elytra longer (in *D. Australiæ* these are said to be scarcely so long as the prothorax,—in the present insect they are distinctly longer). M. Fauvel's description of his species unfortunately consists largely of comparison with a European *Domene* to which I cannot refer, but should judge that its head is less closely punctulate than that of *D. Torrensensis*, as he says that it is "much more sparsely punctured" than that of *D. stilicina*, whereas the head in the present species is punctured about as closely as it well could be.

South Australia; in debris of the Torrens River.

#### PALAMINUS.

I met with a single example last November (in the Victorian Alpine district) of this genus represented in the Australian described fauna by a single species (*P. Australiæ*, Fvl.) described on a unique specimen from Queensland. As M. Fauvel's description (so-called) is merely a brief comparison with a species from New Guinea which probably is not in any Australian Museum, it is impossible to say whether or not the insect before me is identical; I should judge, however, that it is very similar, but it appears to be a little smaller, and is probably distinct. One feels strongly tempted to treat such worthless descriptions as non-existent.

#### BLEDIUS.

*B. insignicornis*, sp. nov. Minus nitidus; antice pube fulva minus crebre vestitus, abdomine setis erectis instructo; niger; mandibulis (his elongatis) antennarum que basi plus

minus rufescentibus, pedibus (tibiis nonnullis exemplis apicem versus infuscatis) et elytrorum macula magna laterali, testaceis; capite prothoraceque (hoc sat transverso, medio canaliculato, leviter minus crebre punctulato) alutaceis; elytris prothorace sat longioribus, sat fortiter sat crebre punctulatis; abdomine subnitido subalutaceo, segmentis singulis apicem versus punctulatis.

Maris mandibulis supra in medio dente suberecto armatis; tuberculis antennariis valde productis; antennis corporis dimidio longioribus.

Feminae mandibulis inermibus; tuberculis antennariis parvis; antennis brevioribus. Long.,  $1\frac{1}{5}$  l.; lat.,  $\frac{2}{5}$  l.

The antennal tubercles of the male are produced into elongate subcylindric processes, while in the same sex the basal joint of the antennae is extraordinarily developed (being as long as the prothorax), and the antennae set back would reach almost to the apex of the elytra. The general facies is entirely that of a typical *Bledius*. The large conspicuous testaceous spot on the elytra near the lateral margin is a very distinctive character.

Victoria; on the banks of the Ovens R.

*B. Ovensensis*, sp. nov. Sat nitidus (capite prothoraceque subopacis); pube argentea vestitus, abdomine setis erectis instructo; niger, mandibulis tibiis tarsisque rufescentibus; capite prothoraceque (hoc minus transverso, lateribus pone medium sinuatim convergentibus) creberrime subtilissime punctulatis; elytris prothorace multo longioribus, crebre sat fortiter punctulatis; abdomine supra vix perspicue (subtus sparsius sat fortiter) punctulato; antennis brevibus.

Maris (?) prothorace haud canaliculato.

Feminae (?) prothorace longitudinaliter subtiliter canaliculato.

Long.,  $1\frac{1}{2}$  l.; lat.,  $\frac{3}{10}$  l.

This species must be near *B. aterrimus*, Fvl., but seems to differ by its differently coloured legs and much longer elytra; these latter are described as scarcely longer than the prothorax in *B. aterrimus*, whereas in the present species they are not much shorter than the head and prothorax together.

Victoria; on the banks of the Ovens R.

*B. infans*, sp. nov. Totus nitidus; pube argentea vestitus, abdomine setis erectis instructo; niger; mandibulis pedibus et nonnullis exemplis antennarum apice rufo-testaceis; capite prothoraceque (hoc minus transverso, lateribus pone medium sinuatim convergentibus, linea dorsali vix impressa) sublaevigatis; elytris prothorace multo longioribus, crebre sat fortiter punctulatis; abdomine supra vix perspicue (subtus sparsim sat fortiter) punctulato; antennis brevibus. Long., 1 l. (vix).

Singularly like the preceding in miniature; differing from it chiefly by its differently coloured legs and nitid sublævigata head and prothorax. It is to be noted, however, that in some examples the femora are more or less infuscate.

Victoria; on the banks of the Ovens R.

#### PSELAPHIDÆ.

##### CTENISTES.

*C. Andersoni*, sp. nov. Rufo-castaneus, elytris postice piceis; antennis minus brevibus; prothorace leviter transverso lateribus evidenter calloso, impressione basali intermedia antice subfurcata; elytris prothorace dimidio longioribus. Long., 1 l.; lat.,  $\frac{2}{5}$  l.

The antennæ are elongate, reaching back beyond the middle of the elytra; joints 1 and 2 short, slightly thicker than the following ones; 3-10 very slightly increasing in thickness. Of these, 3 and 7 are longer than the others and equal to each other, 8 is the shortest and is wider than long, 9 is scarcely longer than 8, 4 is scarcely longer than 9, 5 about equal to 4, 6 a little shorter than 7, 10 scarcely shorter than 7 [7 is quite twice as long as 8]; the eleventh joint is as long as the preceding three together, and is moderately dilated on one side from the base to beyond the middle, and then narrows again to the apex.

This species is evidently near *C. impressus*, Shp. (the largest Australian *ctenistes* previously described),\* but is considerably larger. The antennal joints are very differently proportioned, but not in such fashion as to suggest difference of sex; and the antennæ are considerably longer I should judge (they certainly could not well be called "rather short," as those of *impressus* are). The expression, "elytra distinctly longer than the thorax," applied to *C. impressus*, moreover, suggests shorter elytra than those of *C. Andersoni*, especially in view of *C. simplex*, Shp., being said to have elytra half again as long as its prothorax, and to be distinguished from *C. impressus* by its proportionally shorter prothorax.

S. Australia; taken by my friend, Mr. J. Anderson.

##### BRYAXIS.

*B. Lindensis*, sp. nov. Nitida; setis erectis sat crebre vestita; vix perspicue punctulata; piceo-nigra; pedibus piceis (tibiis antice et tarsis omnibus pallidioribus), antennarum articulis

\* *C. impressus* is stated by its author to be smaller than *C. vernalis*, King, but this seems to be a mistake, as the size given is  $1\frac{1}{2}$  mm. =  $\frac{1}{8}$  inch, whereas *C. vernalis*, King, is given as  $\frac{3}{50}$  inch. The mistake no doubt arises from Archdeacon King having in his original description of *C. vernalis* set down the size as  $\frac{3}{25}$  inch, and afterwards (Tr. Ent. Soc., N.S.W., I., p. 102) stated that this was a mistake.

1-4 11 que rufo-testaceis; capite elongato, inter antennis impresso, postice utrinque fovea magna instructo; prothorace brevi vix subcordato, basi utrinque foveolato, foveis linea transversa conjunctis; elytris prothorace dimidio longioribus, stria suturali profunda altera discoidali (hac apicem versus abbreviata) instructis. Long.,  $1\frac{1}{5}$  l. (vix); lat.,  $\frac{3}{5}$  l.

The antennæ are stout and rather short (scarcely longer than the head and prothorax together); joint 1 is scarcely so long as 2 and 3 together, 3 is much more slender than the rest, 5 and 6 are stouter (5 scarcely larger than 6), 5-10 all transverse and not much different *inter se*, but all a little triangularly dilated on the inner side (so that the antennæ seem subserrate), 11 subconic and nearly as long as the preceding two together, but not stouter.

I am doubtful of the sex of the example before me, as I find no noticeable character in the ventral segments, while the antennal structure seems rather of the male type.

I do not think any previously described Australian *Bryaxis* of large size is of a nearly uniform black colour.

S. Australia; in seaweed near Port Lincoln.

*B. Harti*, sp. nov. Nitida; minus angusta; breviter pubescens; subtiliter minus crebre punctulata; ferruginea; antennis apicem versus infuscatis; his minus elongatis, apice gradatim sat fortiter dilatatis; capite inter antennis impresso, inter oculos foveis 2 magnis profundis instructo; prothorace sat transverso, sat crebre punctulato, trans basin 3-foveolato (fovea media vix perspicua), foveis linea sulciformi conjunctis; elytris prothorace plus dimidio longioribus, antice minus angustato, striis suturali et discoidali fortiter impressis; abdominis segmento 1° 2° paullo longiori, simplicibus. Long., 1 l. (vix); lat.,  $\frac{2}{5}$  l.

Maris segmentis ventralibus in medio impressis, ultimo foveam subrotundatam (penultimo processum tuberculiformem) ferenti; tibiis intermediis intus fortiter emarginatis, super et infra partem emarginatam dentes acutos singulos ferentibus; tibiis anticis intus spina minuta sat longe ante apicem armatis; antennarum articulo 9° 10° vix minore.

Feminae segmentis ventralibus tibiisque simplicibus; antennarum articulo 9° 10° multo minore.

The central basal fovea of the prothorax (as in *B. Ovensensis*) is scarcely more than a slight dilatation of the transverse furrow. The antennæ are as long as the head and prothorax together; joints 1 and 2 are stouter than the following joints; 1 a good deal longer than 2, 3 a little longer than 2; 4-7 scarcely so long as 3, and differing little *inter se* except in 5 being a little the

stoutest; 8 shorter but not less stout (it is distinctly transverse); 9 and 10 about equally wide, but 10 a little longer (9 transverse, 10 scarcely so) in the male [in the female 9 is about intermediate in size between 8 and 10, and 5 is not at all dilated]; 11 somewhat oval, as long as 9 and 10 together, and in the middle wider than either.

This species does not seem very near to any other previously described. The discoidal stria of the elytra seems a little less strongly impressed in some specimens than others, but I think this is an accidental variation.

South Australia; I have taken it near Adelaide, and also find it among some Adelaide specimens taken by the late Mr. Hart. It occurs among vegetable debris on the banks of streams.

*B. hyalina*, Schaufuss. Last November I found a *Bryaxis* in the Alpine district of Victoria which agrees fairly well with the description of this species so far as it goes, but it is impossible to be sure, as the description is very defective—not mentioning the puncturation of any part, and only casually alluding to the existence of any sculpture on the basal dorsal segment of the hind body. If the insect in question be distinct from *B. hyalina*, I should judge that it is likely to be distinguished by the two oblique striæ which run hindward from the front of the basal dorsal segment of the hind body being more strongly divergent, and by the puncturation being different; this on the head, prothorax, and hind body is fine, somewhat sparse, and inconspicuous; while on the elytra it is much coarser and closer, more so than is usual in (at least the Australian species of) the genus. From *B. flavipes*, Schauf. (another allied species), the long basal segment of its hind body will distinguish the present insect, which seems to agree with *B. flavipes* in having the striæ of the basal dorsal segment strongly divergent hindward.

*B. inusitata*, sp. nov. Nitida; sat brevis; sparsim ochraceo-hirsuta; ferruginea; antennis minus robustis; capite sat brevi, antice transversim 3-foveolato, postice utrinque fovea majori instructo; prothorace transverso lævi, postice foveis 3 (transversim positissimis nec linea conjunctis) instructis; elytris prothorace vix longioribus, transversis, perspicue punctulatis, humeris subtuberculiformibus, stria suturali profunde impressa discoidali subtilissima; abdominis segmento 1<sup>o</sup> quam 2<sup>as</sup> 3<sup>as</sup> que conjuncti sublongiori, basi fortiter transversim sulcato, utrinque juxta sulcum stria longitudinali instructo. Long.,  $\frac{3}{5}$  l.; lat.,  $\frac{3}{10}$  l. (vix).

The antennæ are about equal in length to the head and prothorax together. The basal two joints are very similar *inter se*,

each being much stouter, but not much longer than joint 3; joints 3-8 scarcely differ in thickness, except that 5 is very slightly stouter than 4 and 6; 4, 6, 7, and 8 are about equal in length *inter se*, and are slightly shorter than 3 and 5, which also are about equal *inter se*; 9 is scarcely longer than 8, but is stouter; 10 is very little longer, but a good deal wider, being transverse; 11 is about the same length as the preceding two together, and is still stouter than 10.

This species appears to me to stand near *B. brevis*, Schauf., which M. Raffray has formed into a new genus or subgenus, under the name *Schaufussia*. Although it comes very near Herr Schaufuss' description of the species, it does not present the character in the palpi on which *Schaufussia* is founded, and it differs from Herr Schaufuss' description in having the prothorax lævigata. I think its small size, short elytra, prothorax with three unconnected basal foveæ and curiously sculptured basal segment of the hind body are characters that in combination will suffice for identification. I do not find any characters decidedly determining the sex of the two examples before me.

S. Australia; in moss near Port Lincoln.

*B. Ovensensis*, sp. nov. Nitida; angusta; sparsim hirsuta; ferruginea; capite abdomineque vix infuscatis; antennis elongatis sat gracilibus; capite elongato lævi, inter antennis inæquali inter oculos 3-foveolato, foveola intermedia parva; prothorace vix transverso vix cordato, trans basin 3-foveolato (fovea media minus perspicua), foveis linea forti sulciformi conjunctis; elytris prothorace dimidio longioribus sparsim obscure punctulatis, antice fortiter angustatis, striis suturali et discoidali profunde impressis, abdomine ut elytra obscure punctulato.

Maris abdominis segmentis ventralibus in medio planatis; tibiis posticis apice valde introrsum curvatis. Long.,  $1\frac{1}{2}$  l.; lat.,  $\frac{2}{5}$  l.

The antennæ are distinctly longer than the head and prothorax together, and none of the joints are transverse; joints 1 and 2 are a little stouter than the following ones (1 a little stouter than and nearly twice as long as 2), 3-7 a little longer than 2 and subequal *inter se*, 9 very like 2 and slightly larger than 8, 10 about as long as 3, but much wider (almost transverse), 11 fully as long as 9 and 10 together, and evidently wider than 10; joints 1-7 (except, perhaps, 2) are all much longer than wide.

This species is very near *B. strigicollis*, Westw., structurally, but its facies is very different (form narrower and more elongate, antennæ longer and more slender, &c.). It seems to be also near *B. hortensis*, King, *lunatica*, King, and *electrica*,

King. From the first and last of them its antennal structure furnishes a ready distinction. I should hesitate to separate it from *lunatica* were it not for the phrase, "thorace breviter obcordato," in the description of that insect, a phrase which could not be rightly applied to the present insect, the prothorax of which is scarcely, if at all, wider than long. In the figure of the magnified antenna of *B. lunatica*, moreover, the second joint is represented as longer than the third, which is not the case in *B. Ovensensis*.

Victoria; in a marsh near the banks of the Ovens River, among dead leaves.

*B. paludis*, sp. nov. Nitida; sat angusta; vix pubescens; vix perspicue punctulata; ferruginea, antennarum clava vix pallidiori; antennis minus elongatis, clava 2-articulata, hac valde dilatata et elongata; capite inter oculos minute bifoveolato; prothorace æquali minus transverso, quam caput paullo longiori; elytris quam prothorax fere duplo longioribus, striis suturali sat distincta discoidali nulla.

Maris segmento basali ventrali antice creberrime aspere punctulato, postice obscure tuberculato, segmento apicali fovea rotunda impresso; tibiis intermediis intus in medio obtuse dentatis, posticis apicem versus dilatatis arcuatis.

Femina latet. Long.,  $\frac{1}{2}$  l.

The antennæ are scarcely so long as the head and prothorax together; the club consists of two joints, and is not much shorter than all the preceding joints together, and is very strongly dilated. Joints 1 and 2 are very stout and cylindrical, 1 a little longer and stouter than 2; joints 3-9 stout and scarcely increasing in thickness, 3 scarcely transverse, the following joints becoming more so; 10 is about three times as wide as 9, and is as long as the preceding 3 joints together; 11 is of about the same width, and nearly twice as long as 10.

S. Australia; in debris on some marshy ground near Adelaide.

#### EUPINES.

This name was proposed by Archdeacon King for what he considered a subgenus of *Bryaxis*. I am inclined to think it may be treated as a good genus. I have seen numerous species referable to it, and find that (besides the characters mentioned by its author) they agree in exhibiting a uniform type of sexual peculiarity in the sculpture of the meta-sternum and second (the first that is readily apparent) of the ventral segments of the hind-body. The following Australian species apparently attributable to *Eupines*, have already been described (most of them as *Bryaxis*), viz:—

æquata, King	exigua, King	pumilio, Schauf.
affinis, Schauf.	diversicolor, Schauf.	spretta, Shp.
ampliventris, Schauf.	geminata, King	sobrina, Schauf.
aurora, Schauf.	globulifer, Schauf.	sulcata, Shp.
capitata, King	melanocephala, Schauf.	transversa, King
clavatula, King	picta, Schauf.	Victoriae, King
concolor, Shp.	polita, King	vitrea, Schauf.

The following are distinguished from the above species of *Eupines* (though Archdeacon King did not consider the distinction more than sectional) by having antennæ of only 10 joints:—

Elizabethæ, King  
lati-clava, Schauf.

I am doubtful whether the following are *Eupines*:—

atra, King  
læviceps, Schauf.  
talpa, Schauf.  
plecta, Shp.

The species of *Eupines* have much resemblance *inter se* as regards their superficial characters, but, so far as I can judge, are very well characterised by the sexual peculiarities of the metasternum and ventral segments. Unfortunately these are recorded in the description of the following only:—

concolor, Shp.  
sulcata, Shp.  
spretta, Shp.

There are sexual characters also in the antennæ and tibiæ of at least some species, which are more or less exactly recorded in the descriptions of many of the above-named.

The following species in my collection seem to be clearly distinct from any previously described, although it is possible (as noted below) that the first may be an Alpine form of one of Herr Schaufuss' species.

*E. sororcula*, sp. nov. Mas. Fere levis; picea, prothorace vix rufescenti, elytris sanguineis apice infuscatis, antennis palpis pedibus segmentisque ventralibus apicalibus testaceis; setis erectis parce vestita; capite inter oculos bifoveolato, inter antennis vix biimpresso et transversim leviter elevato, antice declivi; prothorace æquali, leviter transverso, vix subcordato; elytris prothorace fere duplo longioribus, humeris callosis, striis suturalibus distinctis; antennis capiti prothoracique conjunctis subæqualibus, tibiis posticis apicem versus leviter dilatatis et sinuatis; abdominis segmento dorsali 1° oblique bistriato, segmento ventrali 2° a basi ad apicem subtiliter in medio carinato; meta sterno postice fovea profunda minori instructo (hac in fundo longitudinaliter sulcata). Long.,  $\frac{1}{2}$  l.

Of the antennæ, joints 1 and 2 are stouter than any of the following 6, and are together scarcely so long as joints 3-5 together; 3 and 4 are equal *inter se*, each much shorter than 2; 5 is very evidently but not very much longer and stouter than 4; 5-8 are equal *inter se*, and each a little smaller than 4; 9 is short and transverse, about as wide as 1; 10 not much longer than, but nearly twice as wide as, 9; 11 a little wider than, and about twice as long as, 10; none of the joints 1-8 are transverse.

Femina. A mare differt antennis (præsertim articulis intermediis) obscurioribus, longioribus, articulis aliter proportionatis; metasterno postice minus fortiter impresso, abdomine simplici.

Of the antennæ of the female, joints 3 and 4 and 6-8 are a little more elongate; 5 is not much longer or stouter than 3; 9 and 10 are together about as long as 6-8, neither of them transverse, 10 longer and wider than 9; 11 is a little longer but scarcely wider than 10.

The superficial characters of this species seem to be near those of *Bryaxis vitrea*, Schauf., of which no sexual distinctions are recorded by its author; the difference in colour is considerable, so that this form is at least deserving of a varietal name, even if it should eventually turn out to be a form of *vitrea*.

Victorian Alps.

*E. nauta*, sp. nov. Mas. Fere lævis; picea, prothorace vix rufescenti, elytris lateritiis, pedibus et antennis (articulis penultimis exceptis) rufis vel rufo-testaceis; glabra; capite prothoraceque æqualibus; hoc sat transverso vix subcordato; elytris prothorace plus dimidio longioribus, humeris vix callosis, striis suturalibus distinctis; antennis quam caput prothoraxque conjuncti vix longioribus; femoribus anticis subtus obtuse dentatis, tibiis anticis intus dente lato sat acuto armatis, femoribus ceteris dilatatis (posticis subtus fere subdentatis); metasterno late profunde excavato, parte excavata in medio obsolete longitudinaliter carinata; abdominis segmento ventrali 2° opaco creberrime aspere punctulato, fossa lata (hac apice carina elevata transversa terminata) per totam longitudinem impresso. Long.,  $\frac{3}{5}$  l.

Of the antennæ, joints 1-3 decrease successively in thickness, 2 and 3 being almost equal to each other in length, 1 a little longer; joints 3-8 scarcely differ in thickness, except 5, which is scarcely thicker than the rest; 4, 6, and 7 are equal *inter se*, each a little shorter than 3 and 5, which are of equal length; 8 is a little shorter than 7; 9 is almost globular, a little longer and stouter than 8; 10 is a little longer than 9, and nearly twice as wide, being pretty strongly transverse; 11 is very little wider

than 10, but is about twice as long; 10 is the only really transverse joint.

Femina. A mare differt antennarum articulo penultimo minus transverso; metasterno multo minus fortiter impresso; femoribus, tibiis, abdomineque simplicibus.

A marked character in this species is the strong contrast in respect of colour between the last two antennal joints; the almost complete absence of setæ, and also of foveæ on the head (two foveæ seem barely indicated in one or two examples), is also distinctive. The exposed portion of the hind body is strongly declivous.

The sexual characters in the antennæ are exceptionally slight, those in the legs, metasternum, and second (the first being scarcely visible) ventral segment are far stronger than in any other *Eupines* known to me.

S. Australia; near Port Lincoln, under the bark of a tree surrounded by flood waters.

*E. nautoides*, sp. nov. Mas. Ab *E. nauta* vix differt nisi tibiis anticis intus haud dentatis, metasterno postice minus excavato, abdominis segmento 2° simplici, elytrorum sutura postice carinata, retrorsum spiniformi producta. Long.,  $\frac{3}{5}$  l.

This insect, of which I possess two examples, is a very puzzling one, and I know not whether to regard it as an abnormal form of *E. nauta*, or as a distinct species; but its differences (such as they are) are so strongly marked that there seems to be certainly good reason for its having a distinctive name. I cannot even feel sure whether it is a male or a female, its ventral character being suggestive of the latter sex, while its dentate femora point very strongly to the former. On the whole I incline to think it the male of a good species of which I have not seen the female; the strong spine into which its elytra are produced at the sutural apex will at once distinguish it from all its described congeners. In the examples before me the legs are of much darker colour than in any *E. nauta* that I have seen, but this is quite likely to be accidental.

S. Australia; near Port Lincoln.

*E. spiniventris*, sp. nov. Mas. Ab *E. nauta* differt antennis sublongioribus; femoribus simplicibus; tibiis anticis posticisque (haud dentatis) paullo ante apicem intus emarginatis; metasterno multo magis late magis profunde excavato; abdominis segmento ventrali 2° sat nitido haud longitudinaliter impresso, postice tuberculum subconicum antrorsum directum, apice acutum formanti.

Femina latet.

My example of this insect is certainly a male, and though very close to *E. nauta* its sexual characters are quite inconsistent with the idea of specific identity. The emargination on the inner side of the front tibiæ is quite noticeable, but occupies only a small part of the tibia; that of the hind tibia is much larger, nearly the apical third part of the inner margin being very slightly concave. The hind tibia is at its widest just above the emargination, so that the dilatation at that point is capable of being regarded as a feeble tooth. The metasternum is largely, deeply, and almost circularly excavated; the corresponding excavation in *E. nauta* appearing as a wide longitudinal impression. The tubercle on the second ventral segment is of peculiar shape, and difficult to characterise intelligibly; the hind margin of the segment seems to be gradually elevated from either side towards the middle (where it is quite spiniform), and also bent forward; so that if the insect be viewed from the side, an inclined plane ending in a sharp point seems to run upward and forward from the apex of the second segment towards the metasternum.

South Australia; near Port Lincoln.

*E. militaris*, sp. nov. Mas. Fere levis, sparsim obscure punctulata; glabra; picea elytris pedibusque manifeste, antennis vix manifeste, rufescentibus; capite haud (vel vix manifeste) bifoveolato; prothorace æquali sat transverso leviter cordato; elytris prothorace dimidio longioribus, humeris callosis, striis suturalibus sat fortiter impressis; antennis capiti prothoracique conjunctis longitudine æqualibus, fortiter clavatis; femoribus basin versus pedunculatis, intermediis subtus dente parvo armatis; tibiis intermediis ante apicem extus leviter emarginatis; metasterno late profunde excavato; abdominis segmento ventrali 2<sup>o</sup> in medio impresso et utrinque obscure tuberculato. Long.,  $\frac{9}{20}$  l.

Of the antennæ, joints 1 and 2 are much stouter than any of the following six joints (which are of uniform thickness), 1 being much longer than 2; 4, 6, and 8 are equal *inter se*, and are the shortest joints; 3 is equal to 2 in length, 5 a little shorter, 7 nearly as short as 4, 6, and 8; 9 is strongly transverse, being scarcely longer than 8, but much wider; 10 is still more transverse, being a little longer than, and about twice as wide as, 9; 11 is ovate, being twice as long as 10, but scarcely wider; 9 and 10 each have a curved pencil of seta on either side at the apex.

Femina. A mare differt femoribus, metasterno, abdomineque simplicibus.

The antennæ of the female scarcely differ from those of the male except in being a trifle shorter.

South Australia; near Port Lincoln.

The species of *Eupines* described above may be thus tabulated.

- A. Glabrous or nearly so.  
 B. Antennæ unicolorous, or nearly so ... *militaris*.  
 BB. Apical joint of antennæ pallid, in strong contrast to joint 10.  
 C. Sutural apex of elytra simple.  
 D. Front femora and tibiæ toothed  
 in male ... .. *nauta*.  
 DD. Front femora and tibiæ  
 simple in male ... .. *spiniventris*.  
 CC. Suture of elytra spiniform at  
 apex ... .. *nautoides*.  
 AA. Body clothed with long erect setæ ... .. *sororcula*.

#### SILPHIDÆ.

##### CHOLEVA.

This genus seems to be fairly well represented in Australia; although only two species have been described. Of these *C. australis*, Er., may be distinguished from all other species known to me by the following characters in combination:—Colour and pubescence black; mesosternum finely carinate; prothorax and elytra transversely strigose. *C. obscurus*, MacL., has not been formally described—the only indication of its characters being a statement (Tr. Ent. Soc. N.S.W., II., p. 155) that it differs from *C. australis* in its pubescence being light coloured, and its prothorax and elytra longitudinally, instead of transversely, scratched or striolated. If it is to be inferred that the prothorax is *distinctly* striolate longitudinally (in the same manner that it is transversely in *C. australis*) I am confident that I have not seen the insect; if the reference be merely to the slight longitudinally striolate appearance resulting (in many species of the genus) from the direction of the adpressed hairs which clothe the surface, there is nothing in the description which would distinguish *C. obscurus* from any species (with one or two exceptions) of *Choleva* known to me. In this latter case it is impossible to describe any new species without running some risk of re-naming Sir W. Macleay's insect; subject to that remark, the following appear to be new. It may be noted that in the Australian species of *Choleva* having the mesosternum carinate (so far as my own observation goes) the carina is not a strongly elevated one like that of the European *C. sericeus*, Fab., but a very fine line running down the centre of the segment, and usually becoming obsolete in the front part; the front part, however, consisting of a sort of thickened transverse fold, which is more *elevated* than the carina, although not truly carinate (as in

many European *Cholera*, in which the mesosternum is non-carinate).

*C. australis*, Er. The specimens which I attribute to this species were taken in the neighbourhood of Adelaide. The only doubt I feel as to their identity is caused by the antennæ being a little stouter than seems quite consistent with the description, which, however, is very brief and general in respect of the antennæ. They are very much like those of the European *C. sericeus*, Fab., to which, indeed, the insect before me bears a very close general resemblance, differing chiefly in its more uniformly black colour (the base of the antennæ even being only a little pitchy), in its very much more finely carinate mesosternum, and in the more rounded sides of its elytra, which are decidedly dilated behind the base; the sculpture of the upper surface scarcely differs in the two species. I am doubtful of having seen the male of *C. australis*, as I do not find any decidedly sexual differences among the few examples I have examined, the tarsi of none of them being distinctly dilated.

*C. antipodum*, sp. nov. Sat elongata; minus parallela; piceo-ferruginea (antennarum articulis basalibus 2 apicalique, capite antice, prothoracis lateribus, pedibus, et corpore subtus, dilutioribus); obscure piceo-pubescentis; creberrime subtilissime punctulata; antennis gracilibus, articulo 8<sup>o</sup> quam 7<sup>as</sup> tenuiori nec breviori; mesosterno antice simplici, inter coxas intermedias spiniformi. Long.,  $1\frac{3}{5}$  l.; lat.,  $\frac{7}{10}$  l.

The antennæ are considerably more slender than in any European species known to me of *Cholera* (e.g., *C. agilis*, Illig.). They are conspicuously longer than the head and prothorax together. Joint 1 is much stouter and slightly shorter than 2; joints 3-6 are of equal thickness *inter se*, more slender than 2; 3 slightly longer than (4-6 each about equal to) 2; 7 slightly shorter and a little wider than 6; 8 as long as, but evidently narrower than, 7; 9 and 10 wider, and slightly shorter, than 8; 11 scarcely wider, but evidently longer, than 10, and acuminate at apex. I do not find any well-marked sexual characters. The mesosternal carina scarcely emerges forward from between the coxæ; the puncturation is finer and slightly closer than in (say) the European *C. tristis*, Panz.

Victoria; in the Alpine district, under fallen leaves.

*C. Adelaide*, sp. nov. Minus elongata; ovalis; ferruginea, capite prothoracisque disco obscurioribus; fulvo-pubescentis; supra subtiliter (in prothorace subtilissime) transversim punctulato-strigosa; antennis sat brevibus robustis, articulo 8<sup>o</sup> quam 7<sup>as</sup> et 8<sup>as</sup> paullo angustiori multo breviori; mesosterno subtiliter carinato. Long., 1 l.; lat.,  $\frac{1}{2}$  l. (vix).

The antennæ are scarcely longer than the head and prothorax together, and seem in respect of robustness and build not very different from those of common European species (*e.g.*, *C. sericea*, Fab.). Joints 1 and 2 are stouter than those immediately following—1 evidently longer than 2; 3-6 moderately increasing in width (3 scarcely shorter than 2, 4 and 5 shorter subequal *inter se*, 6 considerably shorter; 7-11 forming a subparallel club which is nearly as long as joints 1-6 together; 7, 9, and 10 subequal *inter se* (each evidently wider than, and about twice as long as, 6); 8 same width as 6, but still shorter; 11 subconical, a little longer and narrower than 10; joint 6 is strongly, and 8 very strongly, transverse. The sculpture of the upper surface is nearly as in *C. australis*, Er. In the male the front tarsi are pretty strongly (the basal joint of the intermediate tarsi scarcely, if at all) dilated. An example from Port Lincoln has the antennæ with the longer joints testaceous, the shorter one, piceous, but does not seem to differ otherwise.

South Australia; in flood refuse near Adelaide, also near Port Lincoln.

*C. Victoriensis*, spec. nov. Sat elongata; sat parallela; piceo-feruginea, antennarum basi prothoracis lateribus, pedibusque rufescentibus; obscure pubescens; capite prothoraceque subtiliter crebre, elytris minus subtiliter minus crebre, punctulatis; antennis minus elongatis, sat robustis, articulo 8<sup>o</sup> quam 7<sup>us</sup> et 8<sup>us</sup> multo angustiori multo breviori; mesosterno subtiliter carinato. Long., 1 l.; lat.,  $\frac{2}{5}$  l.

The antennæ are perhaps a trifle longer than the head and prothorax together; they are evidently more slender than those of *C. Adelaide*, but much stouter than those of *C. antipodum*. The basal six joints are proportioned *inter se* almost as in *C. Adelaide*, but are more slender; 3-6 of equal width (not as in *Adelaide*, 4-5 each a little wider than its predecessor); joints 7-11 form a parallel club less noticeably wider than the basal part of the antennæ than in *Adelaide*, but with joints similarly proportioned *inter se*; owing to the much greater slenderness of the antennæ, however, joint 6 is not, and 8 is only moderately, transverse. The sculpture of the upper surface resembles that of *C. antipodum*, but is decidedly less fine on the elytra. In the male the front tarsi are strongly, and the basal joint of the intermediate tarsi is distinctly, dilated.

Victoria; Alpine district, among fallen leaves.

*C. minuscula*, sp. nov. Vix elongata; subovalis; fusco-rufa, antennarum articulis intermediis, elytris abdomineque obscurioribus; pubescens; subfortiter minus confertim punctulata; antennis fere ut *C. Victoriensis* sed fere gracilioribus; mesosterno simplici. Long.,  $\frac{4}{5}$  l.; lat.,  $\frac{2}{5}$  l. (vix).

The antennal joints are proportioned *inter se* almost exactly as in the preceding two species, the antennæ as a whole being, however, a trifle more slender than, but of about the same length as, those of *C. Victoriensis*; they are clearly less slender than those of *C. antipodum*. The puncturation of the upper surface is conspicuously less fine than in *C. Victoriensis*. In the male the front tarsi are only gently and the intermediate scarcely if at all dilated. The general appearance is very suggestive of the European *C. Wilkini*, Spence; but the puncturation is distinctly coarser, and the antennæ are more slender than in that species.

South Australia; widely distributed; in vegetable débris.

N.B.—The following is a tabulation of the described Australian species of *Choleva*, the only one omitted, so far as as I know, being *C. obscura*, Macl.

A. Mesosternum carinate.

B. Antennæ of ordinary character.

C. Prothorax transversely strigose.

D. Size very small; colour

not black... .. Adelaidæ, Blackb.

DD. Sizemoderate; colour

black ... .. australis, Er.

CC. Prothorax not transversely

strigose ... .. Victoriensis, Blackb.

BB. Antennæ very long and slender antipodum, Blackb.

AA. Mesosternum simple ... .. minuscula, Blackb.

#### CHOLEVOMORPHA, gen. nov.

Gen. *Cholevam* simulat; differt trochanteribus posticis fere ut *Anisotomæ* formatis; tibiis omnibus spinosis; antennis gracillimis; maris tarsis anticis 3-unguiculatis.

This singular insect would have to be referred to the *Anisotomides*, on M. Lacordaire's arrangement, although its facies is much more that of the *Silphides*. The species before me has the appearance of a very wide robust *Choleva*, with extremely fine slender antennæ and variegated elytra. The antennæ are evidently longer than the head and prothorax together; all the joints are much longer than wide, and are thinly beset with longish fine setæ; of the basal six joints, joint 2 is the stoutest (1 being much longer, but scarcely so stout), 3-6 very slender (4-6 scarcely, 3 considerably, shorter than 1), 7-11 form a feeble club (being together very little shorter, but evidently stouter, than 3-6 together), and are somewhat equal *inter se*, except joint 8, which is much shorter and evidently more slender than the rest (nevertheless, joints 7 and 9 are evidently longer than 10 and 11). The mesosternum is not carinated, although it is very convex, and presents somewhat the appearance of coming to a ridge down the

middle line. In the male, the front tarsi have their basal joint triangular and strongly dilated, joints 2 and 3 dilated, but successively less so; joint 4 is very small, 5 oval and dilated as long as the preceding three together; joint 5 bears at its apex three unequal claws, of which one (the longest) is inserted immediately before the apex, and is strongly curved and scarcely shorter than the apical joint of the tarsus, while the other two are at the apex and are much shorter—one shorter than the other. The intermediate tarsi of the male are considerably longer than the front, and scarcely shorter than the hind, ones; these four posterior tarsi scarcely differ *inter se*, except that the basal joint of the intermediate is evidently dilated. In both pairs, joints 1 and 5 are of equal length, and each as long as joints 2-4 (which are subequal *inter se*) together. The claws are obtusely subdentate at the base. The spines on the front tibiæ are fine and inconspicuous; those on the four posterior strong and well defined. All the tibiæ are bispinose at the apex. The female scarcely differs from the male, except in having the anterior four tarsi and the front claws simple.

The superficial sculpture of the insect on which I am founding this genus is very unusual, and extremely like that of *Catops australis*, Er. I have examples of the latter species (or a very close ally of it) in my collection and, notwithstanding this curious resemblance, find that it cannot be associated generically with this new form; it appears to me to be a true *Choleva*.

*C. picta*, sp. nov. Sat late ovalis; parce pubescens; nigra, antennarum basi, prothorace antice et latera versus, elytrorum maculis nonnullis, pedibusque, plus minus testaceis vel rufis; prothorace minus crebre granulato, fortiter transverso antice fortiter angustato, angulis posticis retrorsum vix productis; elytris crebre transversim punctulato-striatis, stria suturali sat fortiter impressa. Long.,  $1\frac{2}{3}$  l.; lat.,  $\frac{4}{5}$  l.

The pale markings on the elytra are not at all strongly defined in themselves, but are rendered conspicuous by their being clothed with golden pubescence; they consist of a large humeral blotch, a smaller common spot on the suture some distance behind the scutellum, two smaller spots on the front part of the disc, and an irregular narrow fascia of zigzag form about the middle. In some examples some of the markings are wanting.

Victoria; among fallen leaves on the higher mountains (Feathertop, &c.).

#### SCAPHIDIIDÆ.

##### SCAPHIDIUM.

*S. alpicola*, sp. nov. Nitidum; nigrum; prothorace (margine basali et maculis 2 discoidalibus ante medium positis nigris

exceptis), elytrorum fasciis binis suturam versus abbreviatis, pygidio (macula nigra excepta) et corpore subtus (prosterno medio, mesosterno, metasterni lateribus margineque postico, et abdominis basi nigris exceptis) rufis; oculis minus approximatis; prothorace postice linea transversa arcuata punctulata instructo, lateribus fere rectis; elytrorum sutura et ad basin linea arcuata punctulata impressis, his in medio disci puncturarum seriebus 2 antice et postice abbreviatis instructis.

Maris tibiis anticis elongatis, basi fortiter arcuatis; metasterno punctulato pubescenti, utrinque pilis longissimis penicillam formantibus. Long.,  $2\frac{1}{2}$  l.; lat.,  $1\frac{1}{3}$  l.

Colour and markings have been so much relied on in most of the descriptions of Australian *Scaphidia* that it is difficult to specify distinctions other than colour in adding a new species. I have seen several specimens of the insect before me, which I took in decayed wood. Its colouring comes nearest to *S. exornatum*, Oberthür (known to me only by description). In that species the base of the antennæ is said to be red, the femora partly red, the underside (except the apex) black, and the markings of the elytra appear to consist of black spots on a red derm; all these differences point clearly, I think, to specific distinctness—but even if the present insect should be an Alpine form of an already named species, it would be desirable to give it a var. name, as all the examples I have seen are quite identical in colour and markings.

Victoria; in the Alpine district.

#### SCAPHISOMA.

*S. novicum*, sp. nov. Obovatum; nitidum, sparsim valde leviter punctulatum; nigrum, palpis antennarum basi pedibus et elytrorum apice testaceis vel rufis; scutello vix manifesto; elytrorum stria suturali prope basin extrorsum arcuata.

Maris metasterno utrinque postice longitudinaliter profunde sulcato, segmento ventrali penultimo minus abbreviato. Long.,  $\frac{4}{3}$  l.; lat.,  $\frac{2}{3}$  l.

This species is scarcely distinguishable except by its smaller size, much more feebly impressed (though otherwise very similar) puncturation, and sutural stria bent outward at the base, from the European *S. agaricinum*, Leach. The sexual characters of *S. agaricinum*, however, do not seem to have been recorded, and my type of that insect is a female, so I cannot say whether they are similar to those of *S. novicum*. The male example of the latter, from which I have described what I suppose to be sexual characters is immature (it is almost uniformly testaceous in colour), but I do not think the metasternal characters mentioned

above can be due to immaturity as they are quite symmetrical on either side. It was taken in company with the other specimens.

Victoria ; Alpine district, in fungi.

### HISTERIDÆ.

#### CHLAMYDOPSIS.

I feel some hesitation in referring the following two species to this genus, nor do I feel sure that they ought not to be regarded as members of *two* allied genera, both distinct from *Chlamydopsis*. They certainly, I think, appertain to the *Histeridæ*, and they agree very fairly with Professor Westwood's characters of the said genus (I do not feel quite satisfied whether the antennæ have eight or nine joints) as far as those characters go, but it appears to me that if those characters were drawn up from a species at all closely allied to those before me, they do not sufficiently indicate the extraordinary appearance of the insects, which are among the most wonderful I have ever seen. The two examples before me differ very strongly *inter se* (probably they are male and female of two species), but they agree in the remarkable relation of the head and prothorax to each other—a character so singular that I do not like to separate them generically. The head, including the antennæ, exactly fits into the cavity of the prothorax, without protruding from it in the smallest degree, so that in repose the insect appears to have no head, and when looked at from in front the appearance is of the cavity of the prothorax being stopped by an even vertical plate. If the antennæ be drawn out (no easy task!) the head is visible—the cavity of the prothorax being looked at from in front—occupying the middle portion of the cavity, and having on either side of it a large cavern, which is exactly filled by an antenna when the insect is in a state of repose. The antennæ are on the same plan as those of the *Dynastid*-genus *Cryptodus*, consisting of a large lamelliform basal joint (which is the joint that forms the door of the aperture of the antennal cavity), into the hind surface of which is inserted a very short stem,\* at the end of which is a very elongate club, consisting of a single joint. All the tarsi fit completely into cavities in the tibiæ; the front tibiæ fall into grooves of their femora, the front legs fit completely and exactly into cavities at the sides of the prosternum. The whole upper surface is uneven, in a manner defying exact description. The body is furnished with wings. The prosternum is produced anteriorly as in the "*Histérides vrais*" of Lacordaire. The prosternum and mesosternum present truncate and closely applied faces to each other.

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\* As already noted, I cannot satisfy myself whether this consists of six or seven joints; but seven is the more probable number.

In the above characters the two examples before me coincide; they differ very widely in the nature of the inequalities of the surface; in one of them having the hind legs developed to such an extraordinary degree that these are longer than the body, while the hind tibiæ are strongly compressed, and dilated to such an extent that their greatest width is scarcely less than half the width of the prothorax; and in one of them having lateral depressions for the reception of the posterior legs.

It will probably be observed that these characters come very near those of Archdeacon King's genus, *Byzenia*, which that learned author attributes to the *Byrrhidae* (Tr. Ent. Soc. N.S.W., II., p. 74). I have very little doubt that *Byzenia* is really very near the species I am describing (or that it is a *Histerid*), but the Archdeacon says its "legs are not received into cavities," and this is, perhaps, inconsistent with generic identity. In the description of *Chlamydopsis*, Professor Westwood implies (though he does not state it quite categorically) that there are no cavities for the reception of the legs, and, therefore, I suspect *Byzenia* and *Chlamydopsis* are identical (the memoirs characterising them were read in the same year; I believe Westwood's was published before the other). As regards the insects before me, the existence of cavities to receive some or all of the legs would perhaps justify their having a new generic name (or names), but as they are clearly close allies of *Chlamydopsis* I do not think any confusion will arise if I attribute them to the latter genus in the doubt as to the relation of its legs to the body.

I believe the two species described below to be parasitic on fossorial *Hymenoptera*, as I found them both (in different years and different places) on the top of rotten fence posts in which *Hymenoptera* were making their nests.

*C. sternalis*, sp. nov. Mas (?). Subopaca; piceo-ferruginea, antennis pedibus elytrisque dilutioribus; subtiliter punctulata et strigosa, puncturis strigisque confuse intermixtis, illis squamas minutas ferentibus; prothoracis lateribus fortiter bisinuatis, disco a basi ad apicem gradatim elevato cristam magnam formanti (cristæ apice subbifido, lateribus declivibus longitudinaliter bisulcatis, facie anteriori verticali subnitida punctata); scutello haud perspicuo; elytrorum humeris valde callosis; pygidio propygidioque verticalibus; pedibus brevibus; prosterno medio longitudinaliter late fortiter carinato, carina media longitudinaliter profunde sulcata. Long.,  $1\frac{1}{5}$  l.; lat.,  $\frac{2}{5}$  l. (vix).

The posterior four tibiæ are triangular; the apex of the triangle being regarded as the point of attachment to the femur, its longest side is the inner margin, and its other sides (subequal) are the external margin of the tibia and the obliquely truncate apex of

the same. The front tibiæ are not very different, but their external margin is distinctly shorter than their obliquely truncate apex, and forms an obtuse tooth at the point of junction with the latter. The legs are about of equal length *inter se*—all evidently shorter than (say) the length of the elytra.

South Australia; near Woodville.

*C. inæqualis*, sp. nov. Femina (?). Minus opaca; piceo-ferruginea, antennis dilutioribus; crassissime punctulato-strigosa (elytrorum parte basali media, metasterno, abdominisque segmentis basalibus et apicalibus, subtiliter, fere ut *C. sternalis*, sculpturatis exceptis), abdominis parte intermedia fere lævi; prothorace antice valde reflexo elevato-marginato (margine elevato 6-lobato, lobis intermediis 4 quam externi minus elevatis multo minus latis), margine antico quam basis sat latiori, lateribus mox pone marginem anticum retrorsum convergentibus hinc ad basin parallelis; scutello haud perspicuo; elytrorum humeris externe spiniformibus, callis humeralibus maximi gibbosis, parte basali mediana valde depressa (hac subtiliter sculpturata), a parte postica (hac crassissime sculpturata) sulco profundo transverso divisa; pygidio propygidioque rotundatim subverticalibus; pedibus anticis 4 quam elytra (posticis quam corpus totum) longioribus; prosterno æquali. Long., 21. (vix); lat., 11.

The six lobes into which the strongly upturned front margin of the prothorax is divided are not very apparent unless the outline be looked at obliquely from behind, or from in front. The tibiæ (allowing for the much greater length of the legs) are shaped very much as those of *C. sternalis*, except that the external margin of the intermediate pair meets the truncate hind margin (as in the front pair) in a strong obtuse tooth, and that the external margin of the hind pair is very much longer than the truncate hind margin.

South Australia; near Woodville.

#### PHALACRIDÆ.

The only Australian species that I can ascertain to have been already described belonging to this family is *Phalacrus brunneus*, Er., from Tasmania, for which, together with *Sphæridium testaceum*, Fab., Dr. Erichson (Ins. Deutsch. III., p. 108) founded a new genus—*Litochrus*. In 1889 a revision of the family, with especial reference to the N. American species was published in the Annals of the New York Academy, in which *Litochrus* seems to have been re-described. I have not been able to consult this memoir, but from the notice of it in the "Zoological Record," I should infer that neither of the species attributed to *Litochrus* by Erichson has been removed from it. I will, however, take the

precaution of saying that the following species placed in this genus are, no doubt, congeneric with *L. brunneus*, Er. That insect is, unfortunately, not very minutely described by its author; I do not think, however, that any of the species described below can be identical with it. *L. alternans* is the one that comes nearest to it, but it does not seem likely that if Erichson had had that insect before him he could have failed to mention the conspicuous sculpture of its alternate interstices.

## LITOCRUS.

*L. laticulus*, sp. nov. Breviter ovalis; postice vix angustatus; nitidus; niger; capite antice, elytrorum apice et utrinque macula magna discoidali, antennis, palpis, prothorace lateribus, corpore subtus et pedibus rufo-testaceis; capite prothoraceque vix perspicue punctulatis; elytris vix striatis, striis interstitiisque subtilissime punctulatis. Long., 1 l.; lat.,  $\frac{3}{5}$  l.

The pale markings on the elytra consist of a wide curved blotch commencing on either shoulder and proceeding towards the suture and almost touching it at the middle of its length; the pale apex of the elytra is produced forward on either side in such fashion that it almost touches the exterior hind corner of the discal blotch. The pale colouring occupies almost as much area as the black; the latter forms a large triangle, the base of which is the base of the elytra, and its apex is produced narrowly down the suture to about the middle where it dilates into a large blotch; there is also a large black space on either side, which is continuous along the base with the black of the suture.

Victoria; Alpine district.

*L. Palmerstoni*, sp. nov. Breviter ovalis; postice leviter angustatus; nitidus; ferrugineus; antennis, palpis, elytrorum apice, pedibus, et corpore subtus, testaceis; vix perspicue punctulatus; elytris vix striatis. Long.,  $\frac{4}{5}$  l. (vix); lat.,  $\frac{1}{2}$  l.

This minute insect appears to be a typical *Litochrus*. Its uniform ferruginous colour, with the apex of the elytra pale testaceous, and almost impunctulate surface, will, I think, distinguish it from all its described congeners.

N. Territory of S. Australia; near Palmerston.

*L. alternans*, sp. nov. Ovalis, postice attenuatus; nitidus; supra lividus, hic illic infuscatus, cœruleo-iridescens, antennis palpis pedibus et corpore subtus testaceis; capite prothoraceque subtilissime crebre punctulatis, hoc puncturis nonnullis majoribus hic illic impresso; elytris, vix striatis, striis puncturis minutissimis sat crebre impressis, interstitiis alternis sublevibus et puncturis sat magnis seriatim sparsim instructis. Long.,  $1\frac{1}{2}$  l.; lat.,  $\frac{4}{5}$  l.

This species seems to be well distinguished by its peculiar puncturation—very fine, close, and evenly distributed—the prothorax bearing also a few scattered punctures evidently much larger; and the elytra having their scarcely marked striæ closely set with excessively fine punctures, while a conspicuous row of considerably larger and widely spaced punctures runs down interstices 1, 3, &c., 2, 4, &c., being almost lavigate; thus the widely spaced punctures of the alternate interstices are much the strongest sculpture of the elytra.

Victoria; Alpine district.

*L. maculatus*, sp. nov. Breviter ovalis; postice vix angustatus; nitidus; piceus; antennis, palpis, pedibus, capite antice, corpore subtus, et macula magna triangulari communi in elytrorum medio posita, testaceis; capite prothoraceque creberrime subtilissime punctulatis; elytris vix striatis, striis puncturis subtilibus seriatim impressis, interstitiis alternis sublævibus et puncturis sat perspicuis seriatim sparsim instructis. Long., 1 l.; lat.,  $\frac{3}{5}$  l. (vix).

The colouring of this species (which seems to vary only a little in intensity, and in the elytra of some examples being reddish towards the apex) will, I think, distinguish it from all its congeners. Its sculpture is very like that of *L. alternans* (though the punctures in the alternate interstices are scarcely larger than in the striæ), but its size and shape, as well as its markings, are very different and seem to be constant. A short series taken in the Victorian Alps seems attributable to this species, although the specimens vary greatly in size, some being quite twice as large as the South Australian examples; the red spot common to the elytra is, moreover, in most of this Victorian series (especially in the larger examples) evidently less conspicuous.

S. Australia; common in the Port Lincoln district.

*L. suturellus*, sp. nov. Breviter ovalis; postice parum angustatus; nitidus; piceus vel rufo-piceus; antennis, palpis, prothoracis et elytrorum marginibus (sutura inclusa), corpore subtus, pedibusque, testaceis; capite prothoraceque subtilissime confertim (parum perspicue) punctulatis; elytris vix striatis, striis subfortiter punctulatis, interstitiis (præsertim suturam versus) confuse perspicue punctulatis. Long.,  $\frac{3}{5}$ -1 l.; lat.,  $\frac{1}{3}$  l.- $\frac{2}{5}$  l. (vix).

This species may be distinguished from the others known to me by the conspicuous paleness of its suture, which seems to be constant; it may be known from the two preceding by the much more strongly punctured striæ of its elytra and the quite different style of the puncturation of the interstices, which does not vary alternately, but becomes gradually feebler from that nearest the

suture (where it is nearly as strong as in the striæ) towards the external margin, the interstices between the middle of the elytra and the margin being scarcely visibly punctulate. The sculpture of the elytra is very much as in the European *Phalacrus caricis*, Sturm., the punctures in the striæ and in the inner interstices being about as they are in that species. The punctures in the striæ scarcely become feebler towards the lateral margin, nor are they very much finer even close to the apex.

Western Australia.

*L. lateralis*, sp. nov. Breviter ovalis; postice parum angustatus; nitidus; piceo-niger, capite et elytrorum apice paullo rufescentibus, antennis palpis pedibus et corpore subtus testaceis (his nonnullis exemplis paullo infuscatis); capite prothoraceque confertim perspicue punctulatis; elytris vix striatis, striis subfortiter punctulatis; interstitiis omnibus æque confuse perspicue punctulatis. Long.,  $1-1\frac{2}{5}$  l.; lat.,  $\frac{3}{5}-\frac{4}{5}$  l.

var? *major*; prothorace sat late rufo-cingulato. Long.,  $1\frac{1}{5}$  l.; lat., 1 l.

This species is larger than *L. suturellus*, and is very differently coloured; in shape and sculpture the two are very similar, except in *L. lateralis* having the lateral interstices of its elytra punctured quite as strongly as the interstices near the suture.

South Australia; near Port Lincoln. The var? *major* was taken near Adelaide.

*L. frigidus*, sp. nov. Sat breviter ovalis, postice parum angustatus; nitidus; antennarum clava, capite, prothoraceque (lateribus rufescentibus exceptis), nigris; elytris rufescentibus hic illic infuscatis; ceteris rufo-testaceis; capite prothoraceque subtilissime confertim punctulatis; elytris vix striatis striis subfortiter punctulatis, interstitiis omnibus obscure punctulatis. Long., 1 l.; lat.,  $\frac{3}{5}$  l.

The most noticeable character of this species is the black club of its antennæ, of which moreover the stem is more slender than in the other species known to me of *Litochrus*, with the seventh joint scarcely, if at all, longer than the sixth. In the other species I have not found any very available antennal distinctive characters, but they all seem to have the seventh joint distinctly longer than the sixth, and also the third conspicuously elongated. The fact is the antennæ (owing to the compression of the apical joints, which seem more convex moreover on one of the compressed faces than the other) appear different in two examples of the same species unless they are absolutely similarly brushed out, and in these minute insects it is difficult to be sure one has attained this result. The puncturation of the elytra in this species is not much different from that of *L. lateralis*, but owing to the ex-

tremely shining surface and lighter colour of the elytra, the puncturation is less noticeable unless examined under a powerful magnifier.

Victoria ; a single example embedded in snow on one of the higher mountains.

#### LITOCRUS (?)

The next two species represent a type which can hardly stand as truly congeneric with the preceding, as the tibiæ are devoid of apical spines, and the basal joint of the hind tarsi is shorter than the second. It agrees with *Litochrus* in having the hind tarsi evidently longer than the intermediate, in its metasternum produced to the extent of concealing the mesosternum, and in its subglobular front (and adjacent hind) coxæ, &c., &c. I should have no hesitation in founding a new genus for it were it not that I have not been able to consult the diagnoses of the new American Phalacrid genera already referred to, and it is possible that it may pertain to one of them. I find that in the species before me, the clypeus is somewhat more developed than in the preceding, encroaching somewhat on the labrum.

*L. (?) alpicola*, sp. nov. Nitidus ; subcuneiformis ; postice fortiter angustatus ; obscure rufo-testaceus, capite prothoraceque subinfuscatis ; his leviter sat crebre punctulatis ; elytris vix striatis, striis subtiliter perspicue (interstitiis subtilissime seriatim) punctulatis. Long., 1 l. ; lat.,  $\frac{3}{5}$  l.

The most distinctive specific character of this insect seems to be its shape, the sides converging strongly in a curved manner hindward from close to the base of the elytra. The puncturation of the head and prothorax is decidedly less fine than in any of the species of *Litochrus* described above, but it is very faintly impressed.

Victoria ; Alpine district.

*L. (?) uniformis*, sp. nov. Latus ; fere rotundus ; ferrugineus ; sublævis ; elytrorum stria suturali postice manifeste impressa. Long.,  $\frac{4}{5}$  l. ; lat.,  $\frac{7}{10}$  l. (vix).

The whole surface under a powerful Coddington lens shows scarcely a trace of sculpture of any kind—merely the faintest indication of very minute puncturation—except the sutural stria of the elytra, which is moderately defined in the hinder two-thirds of its length. In the example before me all the margins (including the suture) of the elytra are narrowly and obscurely infuscate.

S. Australia ; near Adelaide.

## PHALACRINUS (gen. nov.).

A *Phalacro* differt antennarum clava sat laxè articulata, clypeo antice producto labrum obtegente, mesosterno late manifesto a metasterno haud oblecto, coxis anticis minus globosis, tarsis brevibus inter se longitudine sat æqualibus, his vix perspicue 5-articulatis, posticorum articulo 2<sup>o</sup> quam 1<sup>us</sup> paullo breviori.

This genus has quite the facies of *Phalacrus*, but as will be seen by the above diagnosis there are structural peculiarities which almost suggest hesitation in placing it in the family *Phalacridæ*; especially the extreme indistinctness of the 4th tarsal joint, and the feeble globosity of the front coxæ.\*

*P. australis*, sp. nov. Nitidus; subcuneiformis; postice fortiter angustatus; testaceus; elytris plus minus infuscatis; sublevis, elytris distincte striatis, striis postice (externis totis) punctulatis, interstitiis postice subconvexis. Long.,  $1\frac{1}{5}$  l.; lat.,  $\frac{7}{10}$  l.

The interval between the outermost stria and the lateral margin of the elytron is very wide anteriorly (about two-fifths of the width of the whole elytron); but it narrows hindward very quickly, and is in the hinder half of its length of almost uniform width, and less than half as wide as in front. Each elytron bears 9 striae, none of which quite reach the base except the 4th, 5th, 6th, 7th, and 8th, and of *these* only the 7th and 8th are more than very faintly indicated close to the base. The striae become deeper and more strongly punctulate successively from the suture toward the lateral margin, and also from the base hindward, the puncturation of the 3 or 4 striae nearest the suture being scarcely indicated in front. The 9th stria terminates in front by running rather indistinctly into the 8th considerably behind the base of the elytron, and the 7th and 8th are connected on the base. (In some examples, however, the anterior inflected part of these striae is scarcely traceable, so that the 8th and 9th striae seem to terminate independently) The infuscation of the elytra is

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\* Since writing these remarks I have had the advantage of receiving a communication from Mr. A. Sidney Olliffe, the Colonial Entomologist of N.S. Wales, who has been kind enough to examine a specimen of *P. australis* for me. Mr. Olliffe is a high authority on the Clavicorn genera, whose opinion is much more valuable than mine. He regards what I have taken to be a minute 4th joint of the tarsi as merely a basal dilation of the apical joint, and cannot discover a suture. I have no doubt he is right, and that my observation was incorrect. Apart from this difficulty, Mr. Olliffe would be disposed to refer the insect to the *Phalacridæ*, but regards this objection as a very serious one. However, as it seems to me that *Phalacrinus* would be much more out of place in any other family, I have thought it on the whole best to let it stand where I have placed it, and at the same time to record the notes with which Mr. Olliffe has favoured me.

variable, it appears never to extend to the portion between the 9th stria and the lateral margin; in some examples it consists merely in the *striae* being darker than the general colour, and in others it suffuses nearly the whole disc. The sculpture (excluding the punctulate *striae* of the elytra) is so fine that the insect may almost be called *laevigate*, but the space between the 9th stria and the lateral margin is a little more distinctly punctulate than the general surface. On the underside the puncturation is not much more distinct than on the upper surface except on the sides of the metasternum, where it is moderately defined.

S. Australia; Port Lincoln, also near Morgan.

*P. obtusus*, sp. nov. Latus; postice quam antice parum fortius angustatus; elytrorum striis minus perspicue punctulatis; cetera ut *P. australis*. Long.,  $1\frac{1}{5}$  l.; lat.,  $\frac{4}{5}$  l.

The difference of this insect from the preceding in respect of shape strikes the eye at once, this being at its widest scarcely in front of the middle, and being not much more narrowed hindward than in front, while in *australis* the greatest width is considerably in front of the middle, and the front part of the insect is wide and obtuse, with the hinder part strongly narrowed. In *obtusus* none of the *striae* are distinctly punctulate, while in *australis* the external *striae* are dotted with well-defined isolated punctures.

S. Australia; near Port Lincoln.

*P. rotundus*, sp. nov. Rotundus; brevis; elytris haud longioribus quam conjunctim latioribus; his margine laterali latissimo, striis minus crebre punctulatis; cetera ut *P. australis*. Long., 1 l.; lat.,  $\frac{4}{5}$  l.

This species is exceedingly close to the preceding two, but its shape is so distinctly different that I cannot regard it otherwise than as a good species. Its outline is nearly a circle, the elytra down the suture being (by measurement) not at all longer than they are together wide at their widest part; in the preceding two species they are distinctly longer than together wide. The interval between the 9th stria and the lateral margin is in *P. rotundus* distinctly wider than in the preceding two species, especially in its hinder part. The puncturation of the *striae* is stronger than in *P. obtusus*, and the punctures are less closely placed than in *P. australis*.

S. Australia; near Port Lincoln.

#### PHALACRUS.

*P. corruscus*, Panz. A *Phalacrus* occurring commonly in South Australia, and which I have met with in Victoria also, appears to me incapable of separation from this European species.

*P. Burrundiensis*, sp. nov. Breviter obtuse ovalis; convexus; nitidissimus; niger; antennis pedibusque piceis; elytris perspicue striatis, interstitiis puncturis sat subtilibus biserialim leviter impressis; antennarum clava minus elongata, articulo ultimo præcedentibus 2 conjunctis vix longitudine æquali, apice minus acuminato. Long.,  $1\frac{1}{5}$  l.; lat.,  $\frac{4}{5}$  l.

This species is very like *P. corruscus*, Panz., but differs in being an evidently wider insect in proportion to its length, in its more evenly rounded sides—the greatest width of the body being a little behind, rather than at, the base of the elytra—and in the last joint of the antennæ being scarcely so long as the preceding two together, and being of more conical form, with the apex blunt. The puncturation of the elytra, too, when attentively examined, is seen to be different. In *corruscus* it is fine, close, and even, there being no striæ (except the sutural one), and scarcely a trace of longitudinal arrangement in any part of the puncturation. In the present species the elytra are very feebly striated throughout, the striæ for the most part running in pairs (each pair very close together), and the spaces between the several pairs of striæ (which are much wider than those between the striæ of each pair) bear each two rows of punctures, which are very faintly impressed rather than very fine, but are quite discernible under a good lens. In the example before me the apical joint of the antennæ is obscurely testaceous.

Northern Territory of S. Australia.

#### OLIBRUS.

*O. Victoriensis*, sp. nov. Latus; breviter ovalis; nitidus; testaceo-rufus; capite postice et prothorace (lateribus et basi exceptis) obscurioribus; capite prothoraceque subtilissime confertim punctulatis; elytris punctulato-substriatis, interstitiis perspicue minus crebre punctulatis. Long.,  $1\frac{1}{4}$  l.; lat.,  $\frac{4}{5}$  l.

This insect seems to possess all the characters of *Olibrus*, the hind tarsi longer than the intermediate, with basal joint shorter than the second, tibiæ having apical spines, &c., &c. Compared with *O. corticalis*, Sch., it is a good deal wider in proportion to its length, and is considerably less attenuated behind, and less convex; the puncturation of its elytra is as strong in the interstices as in the striæ, and is slightly stronger than in *Phalacrus caricis*, Sturm.

Victoria; in the Alpine district.

#### NITIDULIDÆ.

In recently working through the specimens belonging to this family in my collection, I have been surprised to find how little

use describers have made of the presence or absence (and the shape) of a piece of the under-surface which is, I suppose, the epimeron of the mesosternum, and which in some genera assumes a remarkable position and form; in *Meligethes* (*e.g.*) it appears as a triangular plate separating from each other in the front half of their length the metasternum and the metasternal episternum. As I am not quite sure that I am right in deeming it the mesosternal epimeron, I propose in the following descriptions, &c., where I have occasion to refer to this piece, to call it the "intermediate plate," so as to avoid the risk of giving it a misleading name. I have looked through several works on the *Nitidulidæ* (*e.g.*, Reitter's "Systematische Eintheilung der Nitidularien," the chapter on the "Nitidulaires" in the "Genera des Coléoptères," the corresponding chapter in the "Insecten Deutschlands") without having found any discussion of this character—although I have no doubt it has been remarked by someone, if I could hit the right author. I have not access to a sufficiently large collection of *Nitidulidæ* to be able to say how far this character would be available for purposes of classification in general; but so far as concerns the Australian species and such European and American ones as are represented in my collection, the interposition of this "intermediate plate" between the metasternum and its episterna, and also its shape when so interposed, appear to be distinctive of genera. I have examined a considerable number of specimens of the following genera, and find this "intermediate plate" in *Cychramptodes*, *Meligethes*, *Pria*, *Macroura*, *Gaulodes*, *Nitidula*, *Cychramus*, *Ips* (all well defined); and in *Amphotis* and *Pocadius* feebly discoverable; while in the *Brachypterides*, *Carpophilides*, *Epuræa*, *Haptoncus*, *Haptoncura*, *Soronia*, and *Omosita* I do not find it at all discernible.

Another character that might, I think, be much used with advantage in classifying the *Nitidulidæ* is the degree of coarseness of granulation of the eye. So far as I have been able to investigate the matter the granulation of the eyes in this family is of three distinct types. It is more or less fine in the *Brachypterides*, *Carpophilides*, *Epuræa*, *Haptoncus*, *Haptoncura*, *Nitidula*, *Amphotis*, *Omosita*, *Meligethes*, *Pocadius*, *Macroura*, *Pria*, *Ips*. In the other genera, *viz.*, *Soronia*, *Gaulodes*, *Lasiodoctylus*, *Cychramptodes*, *Idæthina*, *Æthinodes*, *Cychramus*, it is coarser; but of those with more coarsely granulated eyes (*i.e.*, with the facets large) some have the individual facets almost flat (*e.g.*, *Gaulodes*, *Cychramptodes*), while others have them more or less strongly convex, *Idæthina* (presuming my identification of that genus to be correct) standing pre-eminent in respect of that character.

## HAPTONCURA.

*H. Victoriensis*, sp. nov. Ovalis; pubescens; testacea, prothoracis disco utrinque, antennarum articulis ultimis 4 vel 5 vel 6, et elytrorum disco, infuscatis; confertissime minus subtiliter punctulata; prothorace quam longiori duplo latiori, antrosum angustato, antice leviter emarginato, lateribus ab apice ad basin gradatim magis late reflexo-marginatis, angulis posticis bene determinatis retrorsum subproductis. Long.,  $1\frac{2}{5}$  l.— $1\frac{1}{2}$  l.; lat.,  $\frac{3}{5}$ — $\frac{4}{5}$  l.

This species has entirely the facies of an European *Epuraea*, but clearly belongs, I think, to the genus (or subgenus) *Haptoncura*. Its pubescence and puncturation scarcely differ from the same in *E. pusilla*, Hbst. Compared with that species it is much less elongate and parallel (more like *E. deleta*, Er., in outline), with the sides of the prothorax much less widely reflexed (especially in front), the elytra less widely margined, tibiae with apical spines, &c.

Of Australian *Haptoncura*, no doubt *imperialis*, Reitt, is its nearest ally. I have not, so far as I know, seen that species (the exact habitat of which is not known), but it evidently differs from it in many characters, of which I may specify the puncturation no doubt much stronger (*imperialis* is said to be "subtilissime punctulata"), the front of the prothorax less strongly emarginate, &c. The colours and markings, too, are evidently different, the prothorax having in *imperialis* on either side a black discal vitta, abbreviated in front; this species an elongate blotch (often almost obsolete), not more abbreviated in front than behind; the elytra in typical specimens of *imperialis* having (among other markings) a large common triangular, basal, dark spot. Of the present species I have seen nothing like this in any specimen, but ordinarily there is a large dark spot occupying the greater part of the disc of each elytron, nearly reaching the suture and lateral margin, and widely separated from the base and apex. This spot is liable to be altogether wanting (rarely), or extended over the whole elytron, except the lateral margin. The females are proportionally much broader and more robust than the males.

Victoria; on flowers in the Alpine district.

*H. Lindensis*, sp. nov. Ovalis; pubescens; testacea vel rufa; elytris maculatim et corpore subtus, plus minus infuscatis; leviter (in prothorace sat crebre in elytris magis sparsim) punctulata; prothorace quam longiori vix duplo latiori, antrosum sat angustato, antice subbisinuato, lateribus angustissime reflexo-marginatis, angulis posticis sat rotundatis. Long.,  $\frac{4}{5}$ — $1\frac{1}{5}$  l.; lat.,  $\frac{2}{5}$ — $\frac{3}{5}$  l.

This little species is evidently closely allied to *H. liliputana*,

but differs *inter alia* in its less closely punctured prothorax, with rotundate-obtuse hind angles. From the two other previously described Australian species, and from *H. Victoriensis*, it differs in the very narrow margins of its prothorax. The infuscation of its elytra (which is never clearly defined) consists of a shading round the scutellum and a vitta down the disc of each elytron, which is dilated near, but does not reach, the apex; this vitta is liable to be broken into several small patches, or even to be scarcely discernible, and in some examples the shading round the scutellum is very faint. In some examples the underside is entirely rufous, in others the metasternum or hind body, or both, may be more or less infuscate. The puncturation, I regret that I cannot compare satisfactorily with that of any well-known species; the prothorax is finely alutaceous, and on this surface it is (by no means closely) pitted with faintly impressed, but not very small, punctures; the punctures on the elytra are still more sparse and faint.

S. Australia; common on flowers near Port Lincoln.

*H. Meyricki*, sp. nov. Ovalis; pubescens; testacea vel rufa; elytris et corpore subtus plus minus infuscatis; prothorace confertim sat subtiliter punctulato, quam longiori minus duplo latiori, antrosum angustato, antice bisinuato, lateribus angustissime reflexo-marginatis, angulis posticis rotundato-obtusis; elytris sparsim leviter punctulatis. Long., 1 l.; lat.,  $\frac{1}{2}$  l.

This species is very like *H. Lindensis*. I do not find any noteworthy difference in the colours, except that in ordinary types of this the infuscation of the elytra is almost confined to the region of the scutellum, and that the general colour of the elytra is distinctly paler than in *H. Lindensis*. It can be at once distinguished from *Lindensis* by the much closer and less faint puncturation of the prothorax, and from *H. liliputana*, Reitt., by its different colour, less transverse prothorax, &c.

W. Australia; taken by Mr. E. Meyrick.

*H. uniformis*, sp. nov. Ovalis; vix pubescens; rufo-brunnea vel nigro-brunnea; antennis palpis pedibusque rufis; minus subtiliter subsparisim æqualiter punctulata; prothorace quam longiori minus duplo latiori, antrosum angustato, antice bisinuato, lateribus angustissime reflexo-marginatis, angulis posticis rotundato-obtusis. Long., 1 l.; lat.,  $\frac{1}{2}$  l.

The unicolorous dark reddish or blackish brown colour of this species seems to be distinctive, as also its evenly distributed puncturation, which is evidently stronger than in the preceding two species.

Victoria; on flowers in the Alpine district.

N.B.—As the last three species described above have a considerably different facies from *Epuraea*, owing to the very narrow lateral margins of their prothorax, I should have hesitated to refer them to *Haptoncurea*, were it not for their being evidently close allies of *H. liliputana*, Reitter. It will perhaps be well to mention that they possess the characters which in Herr Reitter's tabulation of the *Nitidulidae* (verh. ver. Brünn, 1873) would refer them to *Epuraea* (from which genus *Haptoncurea* has since been separated), viz., prosternum not produced hindward, tarsi dilated, elytra nearly covering the pygidium, labrum emarginate, apex of mandibles simple, and in addition the tibiæ distinctly spined at the apex and other characters distinguishing *Haptoncurea*.

The described Australian species may be thus tabulated:—

- A. Lateral margins of prothorax widely reflexed.
  - B. Elytral markings consisting of a
    - dark vitta ... .. Victoriensis, Blackb.
    - BB. Elytra not marked as in *imperialis*, Reitt.,  
*Victoriensis* ... .. (subquadrata, Reitt.
  - AA. Lateral margins of prothorax extremely narrow.
    - B. Prothorax rectangular at base  
(colour uniformly testaceous) liliputana, Reitt.
    - BB. Hind angles of prothorax more or less roundly obtuse.
      - C. Prothorax and elytra differently punctured *inter se*.
        - D. Prothorax closely punctured ... Meyricki, Blackb.
        - DD. Prothorax faintly and less closely punctured ... Lindensis, Blackb.
      - CC. Puncturation of upper surface quite uniform uniformis, Blackb.

#### NITIDULA.

*N. quadripustulata*, Fab. This species (doubtless imported) is not uncommon in the neighbourhood of Adelaide. I have not seen any previous notice of its occurrence in Australia.

#### SORONIA.

*S. simulans*, sp. nov. Sat late ovalis; pubescens; crebre punctulata; nigro-picea; prothoracis elytrorumque lateribus (his sat angustis) antennis pedibus et corpore subtus rufescentibus; prothorace quam longiori plus duplo latiori, antrorsum fortiter angustatis, antice sat fortiter vix bisinuatim emarginato, angulis posticis rectis retrorsum leviter productis; elytris sub-seriatim punctulatis, interstitiis alternis fulvo-pubescentibus. Long.,  $2\frac{3}{5}$  l.; lat.,  $1\frac{3}{5}$  l. (vix).

Agrees with *Soronia* in all generic characters, I think,—elytra

almost entirely covering the pygidium, labrum well developed, emarginate, prothorax not overlapping the base of the elytra, prosternum not prolonged in a free process behind the anterior coxæ, tarsi simple, apex of mandibles bidentate.

Of the previously described Australian *Soronia*, I have not seen *S. superba*, Reitt., but from the description it is obvious that it is very different from this species—with conspicuous markings on the upper surface; *S. variegata*, Macl., is stated by Mr. Olliffe (from examination of the type) to be a *Neaspis*; *S. amphotiformis*, Reitt., is a very different insect, with very much wider lateral margins, markings on the elytra, &c., &c.

Compared with the European *S. punctatissima*, Ill., the present species (apart from colour and markings) is less elongate, with lateral margins much narrower, anterior angles of prothorax much less produced, surface of prothorax without inequalities, puncturation of upper surface much more distinct and subrugulose, seriate pubescence of elytra very conspicuous, puncturation of under surface much coarser, &c., &c.

The colour and markings are much like those of several Australian *Nitidulidæ* of other genera, e.g., *Lasiodactylus marginatus*, Reitt.

Victoria; Alpine district.

#### LASIODACTYLUS.

*L. marginatus*, Reitt. (var. ? *obscurus*). Nigro-piceus vel piceo-rufescens; antennis (nonnullis exemplis clava picea) pedibus et corpore subtus rufis, nonnullis exemplis prothoracis lateribus dilutionibus; supra fortiter sat crebre punctulatus; prothorace quam longiori vix duplo latiori, antrorsum sat angustato, antice leviter emarginato, angulis posticis rotundato-obtusis; elytris subseriatim punctulatis, interstitiis alternis seriatim setulosis; tibiis anticis apice extus dente curvato productis. Long.,  $1\frac{4}{5}$  l.— $2\frac{1}{2}$  l.; lat.,  $\frac{1}{5}$  l.— $1\frac{2}{5}$  l.

I have not seen a typical example of *L. marginatus*, Reitt., but the specimens before me agree fairly well with the description, except in respect of colour. As I have seen a good many specimens, the variety seems to be deserving of a name, even if it be only a var.

I have described it sufficiently fully to characterise it as a species if it prove to be distinct from *L. marginatus*, as the description of the latter is wanting in detail—the puncturation, for instance, merely being called “close, and on the elytra irregularly seriate,” without any indication whether it is fine or coarse. I do not know any familiar Australian *Nitidulidæ* with which the puncturation of the present form can be profitably compared. It is not unlike the prothoracic puncturation of *Macroura deceptor*,

Blackb., but this information will not be of much value to most Coleopterists; it is, however, in character very similar to the puncturation of the common European *Ips ferrugineus*, Fab., but is very much closer, the whole upper surface being quite as closely punctured as the head of *Ips ferrugineus*.

The "intermediate plate" on the under surface is moderately large, and is equilaterally triangular in shape.  
Queensland.

#### IDEETHINA.

The following species is so near absolute agreement with Herr Reitter's characters for this genus that I do not think it would be desirable to give it a new generic name merely on the ground of some slight discrepancies. These are that the mesosternum is (not "scarcely," but) *not* carinate, and that the prosternum is not prolonged behind the front coxæ in a distinct process. The structure of the prosternum is not mentioned in Herr Reitter's diagnosis of the genus, but from its being placed near *Ethina* and *Lasiodactylus* the presence may be inferred of at least the "small pin-point-like process" attributed to those two. This, however, I have not been able to detect in the example before me, the prosternum being bent down behind the anterior coxæ almost exactly as in *Soronia*. It is possible, however, that this may be the case in *Idethina*, as otherwise it is difficult to understand why its author has separated it from *Lasiodactylus*, as all the characters given are also attributed to *Lasiodactylus*, except the labrum being very short, and this latter character seems a very feeble one on which to found a genus. The claws of *Idethina* are said to be "simple;" the claws of the specimen before me are certainly not dentate, but they are slightly dilated at the base—not, however, to an extent that seems inconsistent with their being called simple. It is possible that Herr Reitter, if he saw this insect, would give it a new generic name. I may add that the eyes of this insect are more strongly and coarsely granulate than those of any other *Nitidulid* known to me. The piece of the undersurface which I have called the "intermediate plate" (*vide* p. 102) is very large and well defined, almost as in *Meligethes*.

*I. cincta*, sp. nov. Late subcylindrica; subnitida; sat longe fulvo-pubescentis; rufus, prothoracis et elytrorum singulorum disco infuscato; prothoracis elytrorumque marginibus et tibiarum posteriorum 4 marginibus externis dense ciliatis; prothorace quam longiori fere duplo latiori, minus subtiliter sat crebre subrugulose punctulato, antrorsum fortiter angustato, antice emarginato, angulis posticis rectis, lateribus anguste marginatis; elytris postice singulatim late rotundatis pygidii dense pubescentis basin tegentibus, seriatim pube-

scentibus, leviter striatis, striis minus subtiliter punctulatis apicem versus vix profundioribus, interstitiis vix perspicue punctulatis; corpore subtus leviter sat crasse punctulato. Long., 2 l. ; lat., 1 l.

Besides difference in colour, this species seems to differ from *I. Deyrollei*, Reitter, *inter alia*, by its striate elytra and more strongly punctulate prothorax.

S. Australia; taken by Mr. McDougall near Victor Harbour.

#### MACROURA.

Of this genus I have three species before me. One of them (from Western Australia and the Port Lincoln district of South Australia) is, I think, *M. brunnescens*, Reitt., the exact habitat of which has not, so far as I can ascertain, been previously recorded. It agrees with the description in every respect, except that the author does not mention the sutural angles of the elytra being rounded off so as to show a small piece of the propygidium. In his description of the Indian *M. meligethoides*, Herr Reitter mentions the presence of this character, and therefore his omission to mention it in describing *M. brunnescens* seems to imply its absence, but in all other respects the insect agrees so well with the description that I think the omission is probably accidental.

*M. deceptor*, sp. nov. Late ovalis; vix nitida; aureo-pubescentibus; piceo-nigra, labro ore antennis pedibus elytrorumque apice summo rufis; prothorace quam longiori duplo latiori, antrorsum sat angustato, antice leviter emarginato, fortiter sat crebre punctulato, angulis posticis rectis retrorsum sat productis; elytris apice singulatim rotundatis (propygidium in medio aperientibus), sat fortiter vix regulariter striatis, interstitiis ruguloso-punctulatis et seriatim minus perspicue aureo-pubescentibus; pygidio ruguloso. Long.,  $1\frac{3}{5}$  l.; lat.,  $\frac{4}{5}$  l.

Remarkably like a large *Meligethes*; the very strong and not very close puncturation of the prothorax, separately rounded (not truncate) apices of the elytra, the red apex of the elytra and the red antennæ will in combination distinguish this species from all its described congeners.

Northern Territory of South Australia.

*M. Baileyi*, sp. nov. Late ovalis; subnitida; aureo-pubescentibus; atra, antennarum basi pedibusque rufescentibus; prothorace quam longiori duplo latiori, antrorsum fortiter angustato, antice bisinuato, crebre sat fortiter punctulato, angulis posticis rectis retrorsum sat productis; elytris apice singulatim late rotundatis (propygidium in medio aperientibus), sat fortiter sat regulariter striatis, interstitiis rugulosis et seriatim aureo-pubescentibus; pygidio ruguloso. Long.,  $1\frac{3}{5}$  l.; lat.,  $\frac{4}{5}$  l.

Resembles the preceding species, but differs in colour and in the evidently closer and less strong puncturation of the prothorax, which is about as strong as (and somewhat closer than) that of the prothorax of the European *Brachypterus urticae*, Fab. Of the previously described species *M. brunnescens*, Reitt., and *nigra*, Reitt., are considerably larger, the former (as also *M. densita*, Reitt.) having the prothorax very much more finely punctured, and the latter—besides having the prothorax more finely punctured (as I should judge from the description)—having black pubescence and elytra truncate at the apex.

Queensland; taken on Mount Bellenden-Ker by F. M. Bailey, Esq. (of botanical fame).

ÆTHINODES (gen. nov. *Nitidulidarum*).

Labrum transversum emarginatum; antennarum clava magna fortiter compressa, articulis fortiter transversis; oculi parvi fortiter prominentes fortiter granulati; prothorax elytrorum basin haud tegens; elytra pygidium fere totum tegentia; prosternum pone coxas breviter productum et abrupte in apicem acutum retrorsum angustatum; tarsi modice dilatati; unguiculi basi dente obtuso armati; corpus ovale pubescens; mesosternum carinatum.

I cannot ascertain that any genus has been described hitherto to which an insect presenting the above characters could be referred without a likelihood of causing confusion, and therefore I am obliged to give a new name.

The piece of the undersurface which I have called the "intermediate plate" is very distinct; it is narrow and elongate, much as in *Gaulodes*, and not unlike the corresponding piece in *Ips*. Other characters that seem likely to be generic are great elongation of the third joint of the antennæ, as compared with the following joints, and the disappearance of the third and fifth rows of pubescence on the elytra considerably before the apex.

I think the position of this genus will be near *Lasiodactylus* and *Æthina*, which have a very similar prosternal process—broad immediately behind the coxæ, and then narrowed to an apical angle very abruptly, so that the part behind the coxæ is triangular, and yet very short. I have not been able to examine the mandibles. The tarsi are dilated a little more strongly than in *Amphotis*. The eyes resemble those of the European *Cychramus luteus*, Kug., but are smaller, and even more prominent.

*Æ. marmoratum*, sp. nov. Late ovale, postice sat angustatum; sat nitidum; pubescens; rufo-ferrugineum, prothorace elytrisque maculatum infuscatis; prothorace quam longiori duplo latiori, minus subtiliter minus crebre punctulato,

antrorsum sat fortiter angustato, antice emarginato, angulis posticis acute rectis retrorsum subproductis, lateribus minus anguste reflexo-marginatis; elytris postice singulatim rotundatis, fere ut prothorax punctulatis (sed puncturis subseriatim dispositis), seriatim pubescentibus, apicem versus seriebus 1<sup>a</sup> 2<sup>a</sup> 4<sup>a</sup> que in carinis elevatis, 3<sup>a</sup> 5<sup>a</sup> que obsoletis. Long., 1 $\frac{2}{5}$  l.; lat., 1 l.

Besides the apical part of the first, second, and fourth rows of pubescence, the parts of the sixth and seventh immediately behind the middle seem to be a little elevated.

In the example before me the infuscation on the disc of the prothorax is blotchy and very ill-defined, while that on the elytra is very distinct, consisting of a large common basal triangle and a number of small spots, the largest of which are on either side of the suture near the apex.

Tropical Australia; I am not sure of the exact locality.

THALYCRODES (gen. nov. *Nitidulidarum*).

Labrum bilobum; antennarum clava ut *Thalycræ*; oculi sat magni sat prominentes modice granulati; prothorax elytrorum basin haud tegens; elytra pygidii partem tegentia; prosternum ut *Lasiodactyli*; mesosternum subtiliter carinatum; tibiæ omnes extus dentibus spinulisque armatæ; tarsi simplices; unguiculi basi vix compresso-dilatati; corpus pubescens, marginibus dense ciliatis.

The species for which I propose this name cannot be referred to *Thalycra*, on account of their having all their tibiæ strongly armed externally, the claws not truly simple, and the mesosternum traversed longitudinally by an extremely fine elevated line. I cannot help thinking that *Thalycra australis*, Germ., is congeneric with the species before me, and that its author overlooked the extremely fine carina on the mesosternum—indeed, I should have no hesitation whatever in considering one of the insects before me as identical with it specifically if it were not for this difficulty. I have therefore given it the name *australe*, as I am satisfied that, if generically, it is also specifically identical.

The “intermediate plate” on the undersurface of this genus is decidedly large, and forms a triangle. The third joint of the antennæ is, as in *Ethinodes*, longer than the next two together. Unfortunately, I have not been able to compare these species with a specimen of *Thalycra*, and have had to depend upon descriptions of that genus, aided by my memory of it, in making the preceding remarks.

*T. australe* (? Germ.). Ovale; convexum; sat nitidum; pubescens; ferrugineo-brunneum (elytris nonnullis exemplis obscure testaceo-maculatis); prothorace quam longiori duplo

latiori, minus subtiliter minus crebre punctulato, antrorsum sat fortiter angustato, antice emarginato, angulis posticis rotundatis lateribus anguste marginatis; elytris postice rotundato-truncatis, vix striatis, striis crebre punctulatis, interstitiis vix punctulatis alternis griseo-pilosis.

var. *tenebrosum*; corpore et antennarum clava nigrescentibus, elytris manifeste testaceo-maculatis. Long.,  $1\frac{1}{4}$ — $1\frac{1}{2}$  l.; lat.,  $\frac{3}{5}$ — $\frac{4}{5}$  l.

The front tibiæ have three blunt teeth placed round the apical external margin: the intermediate tibiæ have their external margin finely spined in its whole length, and there is a large bifid tooth a little before the apex, and a simple sharp one still nearer to the apex; the external margin of the hind tibiæ is finely spined in all its length, and bears close to its apex a long tooth which ends in two spines. The "intermediate plate" is in the form of an equilateral triangle, and is of large size.

The pale markings on the elytra consist of three or four large spots placed at intervals on either side of the suture in the anterior two-thirds of its length, and an additional spot on the base at the shoulder. In ordinary specimens they are scarcely, or not at all, noticeable; in the var. *tenebrosum*, they are very conspicuous.

S. Australia; near Adelaide, also near Port Lincoln.

*T. pulchrum*, sp. nov. Ovale; convexum; pubescens; ferrugineum, elytris notis infuscatis numerosis maculatis; prothorace quam longiori duplo latiori, minus subtiliter sat sparsim punctulato, antrorsum sat fortiter angustato, antice emarginato, angulis posticis bene determinatis obtusis, lateribus anguste marginatis; elytris postice rotundato-truncatis, leviter striatis, striis crebre punctulatis, interstitiis vix punctulatis alternis griseo-pilosis. Long.,  $1\frac{2}{5}$  l. (vix); lat.,  $\frac{3}{5}$  l.

The front tibiæ are strongly crenulate all along their external edge, and have two strong sharp teeth, one at the apex, the other immediately before it; the middle and hind tibiæ are feebly and widely serrate externally, and also bear a series of strong spines, their apex being dilated externally into a kind of blunt tooth, on which are several longer spines. The dark markings on the elytra are very distinct and very intricate. The suture is infuscate, a series of spots forms a kind of festoon from shoulder to shoulder, crossing the suture at about a-third of its length from the base, and on either side sends a branch forward to the base from the middle of its length between shoulder and suture, several spots placed transversely occupy the middle part of each elytron, and the apex is edged with dark-brown, which is continued on either side and then arched forward to the suture so as

to form a ring intersected by the dark suture on either side of which it thus encloses a patch of the pale ferruginous ground colour. The "intermediate plate" is in the form of an equilateral triangle, but is much smaller than in the preceding species.

S. Australia; near Port Lincoln.

*T. cylindricum*, sp. nov. Sat elongatum; subparallelum; subcylindricum; piceo-nigrum, capite prothoraceque obscure rufescentibus; antennis (clava excepta) pedibus et elytrorum maculis nonnullis rufis; prothorace quam longiori dimidio latiori, vix subcanaliculato, crebre minus subtiliter subaspere punctulato, antrorsum minus angustato, antice leviter emarginato, angulis posticis rotundato-obtusis, lateribus sat anguste marginatis; elytris postice rotundato-truncatis, leviter striatis, striis crebre punctulatis, interstitiis subrugulosis, alternis griseo-pilosis; oculis minus fortiter granulatis. Long.,  $1\frac{2}{3}$  l.; lat.,  $\frac{2}{3}$  l.

Although the subcylindric form and less strongly granulated eyes of this insect suggest considerable doubt as to whether it is rightly placed here, I cannot regard those characters as sufficient foundation for a new genus. The 3rd joint of the antennæ is a little less elongate than in the preceding two species, and on the under surface the "intermediate plate" is considerably narrowed and elongated; the other structural characters seem identical. The red blotches on the elytra are not very strongly defined (having somewhat the appearance of being marked on the inner surface of the elytra, and seen through its substance)—but I have no doubt their brightness is variable. They are very similar to those in some examples of *T. australe*.

The front tibiæ are very like those of *T. pulchrum*, but their crenulations are feebler and they have only a single blunt bifid tooth at the apex; the middle and hind tibiæ are spined externally, and have a bifid tooth close to the apex.

Victoria; in the Alpine district.

## TROGOSITIDÆ.

### NEASPIS.

*N. pusilla*, sp. nov. Elongato-ovalis; sat nitida; setulis albidis confuse vestita; picea, antennis basin versus prothoracis elytrorumque lateribus corpore subtus et pedibus plus minus rufescentibus; capite prothoraceque crebre obscure subrugulose punctulatis; hoc quam longiori plus duplo latiori, antrorsum leviter angustato antice leviter emarginato, angulis posticis subrectis retrorsum subproductis, lateribus late marginatis ciliatis subtiliter serratis; elytris sat crasse subrugul-

lose subseriatim punctulatis lateribus subtiliter ciliatis.  
Long.,  $1\frac{1}{2}$  l. ; lat.,  $\frac{3}{5}$  l. (vix).

Very like the common *N. variegata*, Macl., but *inter alia* without any pattern on the elytra, much smaller, more elongate, with the prothorax more transverse and less emarginate in front, with anterior angles scarcely at all produced, and having its lateral margins finely serrate.

South Australia ; near Adelaide.

#### PELTONYXA.

I have before me two species evidently belonging, I think, to this genus, but I cannot identify either of them with the previously recorded *P. Deyrollei*, Reitt., which is a much larger insect, besides differing in several other particulars.

*P. australis*, sp. nov. Elongata, postice leviter dilatata, minus convexa ; vix pubescens ; ferruginea, elytris dilutioribus, prothoracis disco utrinque (nonnullis exemplis) nigro-umbrato ; capite prothoraceque opacis confertim subtilissime punctulatis ; hoc quam longiori duplo latiori, antrorsum parum angustato, lateribus minus rotundatis minus late reflexis, angulis posticis rotundato-obtusis ; elytris fortiter seriatim punctulatis, interstitiis alternis vix elevatis. Long.,  $1\frac{2}{5}$  l. ; lat.,  $\frac{3}{5}$  l.

South Australia ; Adelaide district.

*P. pubescens*, sp. nov. Elongata, postice leviter dilatata, minus convexa ; pilis erectis sat elongatis vestita ; nigro-brunnea, antennis pedibus et prothoracis elytrorumque lateribus testaceis ; capite prothoraceque subtiliter rugulosis ; hoc quam longiori duplo latiori, antrorsum parum angustato, lateribus minus rotundatis sat anguste reflexis, angulis posticis rotundato-obtusis ; elytris fortiter rugulose subseriatim punctulatis. Long.,  $1\frac{2}{5}$  l. ; lat.,  $\frac{3}{5}$  l.

Victoria ; under bark of Eucalyptus in the Alpine district.

#### COLYDIIDÆ.

The determination of the question whether a given insect should be referred to this family or to the *Tenebrionidæ* seems capable of depending merely on the existence or non-existence of a minute basal joint of the anterior four tarsi. *Byrsax*, for instance, was originally placed in the *Colydiidæ* as having tetramerous tarsi, and some years later its author, Mr. Pascoe, reported his having discovered it to be heteromerous, and so transferred it to the *Tenebrionidæ*. I draw attention to the close analogy (even if it be no more) between these families, because I have several new species before me for description, which I refer to the

*Colydiidae*, but with a doubt whether they may not possess—as *Byrsax* is said to do—“a basal (tarsal) joint completely hidden in the cotyloid cavity of the tibia,” which I have failed to discover.

## DITOMA.

*D. pulchra*, Blackb. In the Alpine district of Victoria I have met with some examples of an insect which appear to be scarcely specifically distinct from this S. Australian species, although they are smaller and darker than the type. They vary a little in the prominence of the lateral dilatation of the prothorax, and I am not quite sure that they do not represent a distinct species, but I cannot find any invariable character by which to distinguish them. This insect bears a very remarkable general resemblance to *Sparactus interruptus*, Er.

*D. torrida*, sp. nov. Minus depressa; minus nitida; glabra; ferruginea; capite postice prothoracis disco et elytrorum maculis numerosis (his fascias 4 irregulares formantibus) obscure fuscis; prothorace granulato, utrinque bicostato et inter costas internas basin versus carinis 2 arcuatis instructis, costis et marginibus lateralibus (his late reflexis) subtiliter crenulatis, angulis omnibus acutis; elytris singulis carinis 5 valde elevatis instructis, interstitiis crasse biserialim punctulatis. Long.,  $2\frac{1}{2}$  l. (vix); lat.,  $\frac{2}{5}$  l.

This species must be near *D. serricollis*, Pasc.; in that species, however, *inter alia*, the upper surface appears to be of a uniform dark-brown colour—the prothorax to be simply bicostate on either side instead of having a short arched additional costa looped on to each of the inner costæ near the base—and the head to be trilobed in front, whereas the head of the present species is rotundate-truncate in front, very much as that of the European *D. crenata*.

N. Queensland; in the collection of C. French, Esq.

*D. nivicola*, sp. nov. Minus depressa; subnitida; setis suberectis minus crebre vestita; brunneo-nigra; antennis, capite antice, prothoracis lateribus, elytrorum maculis parvis nonnullis (his testaceo-pubescentibus) et pedibus, rufis; capite prothoraceque crebre granulosis; hoc minus inæquali, lateribus fortiter serratis a basi antrorsum gradatim magis fortiter dilatatis antice valde productis; elytris striatis crasse subseriatim rugulose punctulatis. Long.,  $1\frac{3}{5}$  l.; lat.,  $\frac{3}{5}$  l. (vix).

The colours and markings of this species are much like those of *D. hilaris*, Blackb., but the latter is a considerably narrower and more elongate insect, with the prothorax much less dilated laterally, the elytra less coarsely sculptured, &c.

Victoria; Alpine district, under the bark of a *Eucalyptus* standing in a snowdrift.

## SARROTRIUM.

*S. australe*, sp. nov. Elongatum; nigrum; antennis squamis griseo-ferrugineis vestitis, pedibus ferrugineis, elytris fasciis 2 rufis ornatis; capite utrinque pone oculos spina armato; prothorace antrorsum angustato, angulis anticis lateraliter subspinoso; elytris profunde punctulato-striatis, longitudinaliter 3-costatis, costis externis pone medium sinuatis. Long., 2 l.; lat.,  $\frac{3}{5}$  l. (vix).

Several genera of *Tenebrionidae* (e.g., *Elascus*) have been described, the remarkable similarity of which to *Colydiid* genera has been remarked on. I at first supposed this present species to pertain to one of them, but on careful examination I find that it does not; with the aid of a compound microscope I feel sure that it is not heteromorous; it can be so only if there is a very minute basal joint of the anterior tarsi so imbedded in the cotyloid cavity of the tibia as to be discoverable only by dissection, which I have not been able to employ, having only a single example. The fasciæ on its elytra are of a bright red colour; one of them commences a little behind the shoulder on the margin and runs obliquely to the suture a little in front of the middle, the other being subapical and straight. The short lateral spine into which the antennal orbit is drawn out behind the eye is a very distinctive character. The head and prothorax are extremely like those of *Sarrotrium clavicornæ*, and the antennæ are almost exactly like the antennæ of that species, though a little less stout.

It may be remarked that the specimen before me is in its structural characters extremely like the figure of *Latometus pubescens*, Er. (Wieg. Arch., 1842, I., tab. 5, fig. 3); it is, however, evidently much narrower and more elongate, and moreover the figure represents *Latometus* as having all the five joints of the anterior four tarsi quite well defined.

Victoria; in the Alpine district.

## MERYX.

*M. aequalis*, sp. nov. Elongata; parallela; supra æqualis; subnitida; subreticulatim albido-pubescens; capite prothoraceque confertim subtiliter punctulatis; hoc postice minus angustato, lateribus crenulatis; elytris sat fortiter vix seriatim punctulatis, vix manifeste 3-costatis; antennarum articulis ultimis 2 quam 9<sup>us</sup> nonnihil brevioribus; palporum maxillarum articulo ultimo apice oblique truncato. Long.,  $3\frac{1}{5}$ —4 l.; lat., 1— $1\frac{2}{5}$  l.

The whitish pubescence is very inconspicuous on the prothorax; on the elytra it is very distinct, but not very sharply limited; it forms a reticulated pattern somewhat like the reticulation formed in the previously described species by costæ. Compared with

*M. illota*, Pasc., the present species is less opaque, its prothorax is less narrowed behind, and its antennæ are longer, more slender, and less incrassate towards the apex, with the apical two joints distinctly though not much shorter than the preceding joints; the last joint of the maxillary palpi is a little more sharply triangular than in *M. illota*.

South Australia; near Port Lincoln, under bark.

SPARACTUS.

This genus is remarkably like *Ditoma* superficially, but may be at once distinguished by the 3-jointed club of its antennæ. A species occurring not uncommonly in S. Australia and Victoria agrees very well with the description of *S. interruptus*, Er., the only species named up to the present time. The following seem to be new:—

*S. pustulosus*, sp. nov. Opacus; niger, antennis pedibus prothoracis lateribus elytrorum basi et corpore subtus obscure rufescentibus; supra granulatus; capite angulos 4, prothorace processus serratos 3, utrinque formantibus; horum antico permagno antrorsum curvato-producto; prothorace supra tuberculis conicis instructo; elytris 3-seriatim tuberculatis. Long., 2 l.; lat.,  $\frac{4}{5}$  l.

S. Australia; common under bark of Eucalyptus in various localities.

*S. elongatus*, sp. nov. Opacus; niger, antennis pedibus capite antice prothoracis lateribus et corpore subtus rufescentibus; supra granulatus; capite quadrato, antice rotundato-truncato, lateribus reflexis; prothorace antice fortiter bisinuato, lateribus leviter sinuatis late reflexis crenulatis, disco tuberculis parvis nonnullis instructo; elytris obscure 3-seriatim tuberculatis. Long.,  $2\frac{1}{2}$  l.; lat., 1 l. (vix).

S. Australia; Port Lincoln district.

*S. proximus*, sp. nov. Opacus; niger, capite antice antennis pedibusque rufescentibus; supra granulatus; capite fere ut *S. interrupti*, Er., sed angulis subanticeis rotundatis; prothorace inæquali, antice dilatato, margine crenulato; elytris 3-costatis, costis interioribus interruptis. Long.,  $1\frac{2}{5}$  l.; lat.,  $\frac{3}{5}$  l. (vix).

Very like *S. interruptus*, Er., but differently coloured and sculptured, the upper surface (except the reddish front of the head) being unicolorous; the inner two costæ on each elytron being less frequently, and less widely, interrupted (so that they appear much less like a series of tubercles); and the hinder of the two angles of the sides of the head being quite rounded off. In both these species the upper surface of the head is flattish and

more or less quadrate, but very close to its front margin is suddenly contracted into an extremely short parallel-sided prolongation; in both, the sides and front of this terminal piece meet in sharp angles, and in *S. interruptus* there is also a well-defined angle at the point where the head is contracted, while in *S. proximus* this part is rounded off.

*S.* Australia; near Adelaide.

*S. costatus*, sp. nov. Opacus; niger, pedibus plus minus piceis; antennis tarsis et corpore subtus obscure rufescentibus; supra granulatus; capite prothoraceque fere ut *S. interrupti*; elytris 3-costatis, costis haud interruptis. Long.,  $1\frac{1}{5}$ — $1\frac{3}{5}$  l.; lat.,  $\frac{2}{5}$ — $\frac{3}{5}$  l.

*S.* Australia; widely distributed, and not rare.

The following is a tabulation of the described species of *Sparactus*.—

A.	Elytra with all their costæ entire	...	costatus, Blackb.
AA.	The inner two costæ interrupted.		
	B. The subapical angles of the head rounded...	...	proximus, Blackb.
	BB. The subapical angles of the head well defined	...	interruptus, Er.
AAA.	All the costæ broken up into tubercles.		
	B. Prothorax simply sinuate in lateral outline	...	elongatus, Blackb.
	BB. Lateral margin of prothorax cut into large and conspicuous processes	...	pustulosus, Blackb.

#### BOTHRIDERES.

*B. Victoriensis*, sp. nov. Nitidus; prothorace fortiter punctulato, disco late depresso, medio vix elevato; niger; antennis pedibusque piceo-rufis, elytris fulvo-castaneis; his striatis, interstitiis subconvexis obscure punctulatis inter se æqualibus. Long., 2 l.; lat.,  $\frac{3}{5}$  l.

Very like the common *B. vittatus*, Newm. Compared with it, the head does not differ noticeably—the prothorax is a little more elongate (being quite as long as wide) with the discal impression less marked—the elytra have not the sutural dark stripe, and their interstices are very different (the second being as wide as the first and third, and all of them being slightly convex). I do not think this species can be identical with *B. musicus*, Pasc., which, however, it, perhaps, somewhat approaches; its colour seems to be very different, and also I cannot find any elytral sculpture agreeing with that attributed to *B. musicus*, which is said to have “three lateral alternate interstices costæform.”

Victoria; Alpine district.

*B. merus*, Pasc. This species is not very intelligibly described. In the author's tabulation of the genus it is placed as "sub-opaque," but in the description it is called "subnitid." It is further distinguished from *B. musivus* by several characters, and it is added, "in both the elytra are less deeply striated," suggesting the enquiry, "less deeply than what?" Perhaps words may have been omitted by a printer's error.

I have before me a species which occurs not uncommonly under bark of *Eucalyptus* in the Alpine district of Victoria, which, I think, is probably *B. merus*; it is a trifle less nitid than is usual in the genus, and seems to agree with Mr. Pascoe's description, such as it is. The longitudinal convexity down the centre of the depressed space on the prothorax is, however, a little better defined than the description would lead one to expect. It is remarkable for its very small narrow head, a character not referred to by the author of *B. merus*. It has the third elytral interstice much narrower than either the second or fourth, a character which at once distinguishes it from *B. Victoriensis*. Of the other species having prothoracic sculpture of similar character, *musivus*, Pasc., seems to be larger, and to have "three lateral alternate interstices costæform" (*sic*); *costatus*, Blackb., has elytra very differently sculptured; *vittatus*, Newm., has a much wider head, different colours, &c.

#### CUCUJIDÆ.

##### SILVANUS.

*S. armatulus*, sp. nov. Minus elongatus; sat convexus; pubescens; ferrugineus; prothorace quam longiori vix latiori, crebre subtiliter rugulose punctulato, supra æquali, lateribus fortiter 6-dentatis; elytris punctulato-striatis. Long., 11.; lat.,  $\frac{3}{10}$  l.

Not unlike *S. advena*, Kunz, in outline and convexity, but with the prothorax more elongate, narrower (especially behind), and armed at the sides with six strong teeth.

Victoria; Alpine district.

*S. monticola*, sp. nov. Sat elongatus; sat convexus; pubescens; ferrugineus; capiteprothoraceque obscuris; hoc quam longiori haud latiori, confertim subtiliter vix rugulose punctulato, supra æquali, lateribus subrectis subtiliter sat crebre denticulatis, ad angulos anticos dente majori instructis; elytris punctulato-striatis. Long., 11.; lat.,  $\frac{3}{10}$  l. (vix).

Very like the preceding species, but narrower and more elongate, with the sides of the prothorax very differently sculptured.

Victoria; under bark of *Eucalyptus* in the Alpine district.

## CRYPTOPHAGIDÆ.

## CRYPTOPHAGUS.

*C. Lindensis*, sp. nov. Oblongo-ovalis; sat convexus; ferrugineus; pube fulva minus brevi vestitus; prothorace transverso, confertim sat fortiter rugulose fere confluentes punctulato, supra æquali (nihilominus trans basin depresso), lateribus ante medium leviter rotundato-dilatato; antennarum clava 3-articulata, articulis minus fortiter transversis. Long., 1 l. (vix); lat.,  $\frac{3}{10}$  l.

This little species seems to be a true *Cryptophagus*, and I cannot identify it with any described species, though it is, I think, rather close to *C. pubescens*, Sturm., but *inter alia* it has no trace whatever of the angular dilatation which that species presents in the middle of the lateral margin of its prothorax.

Compared with *C. affinis*, Sturm. (the only species of the genus previously recorded as found in Australia), the present insect is considerably smaller and narrower; its puncturation is markedly closer on the prothorax, and a little less close on the elytra; the sides of its prothorax are straight and parallel from the base to beyond the middle, their front part having the lateral strongly margined dilatation so characteristic of *Cryptophagus*, but this is not quite so strong as in *C. affinis*; the antennæ are not quite so stout as in *C. affinis*, and their club is different, its joints being about equal in width, the first and third only slightly transverse, the second shorter than the other two, and moderately strongly transverse, but much less strongly so than either the first or second in *C. affinis*.

S. Australia; Port Lincoln district, under bark of *Casuarina*.

## ATOMARIA.

Although I cannot find that any Australian species of this genus have been described, the genus is well represented in Australia. The following are among the species in my collection:—

*A. australis*, sp. nov. Ovalis; convexa; pubescens; sat fortiter sat crebre æqualiter punctulata; subtus nigra, supra ferruginea; elytris pone medium nigro-fasciatis, antennis pedibusque rufescentibus; prothorace transverso subquadrato, basi haud marginato, ante basin utrinque fovea profunda rotundata impresso; antennis basi sat distantibus. Long., 1 l.; lat.,  $\frac{2}{5}$  l.

South Australia; widely distributed.

*A. Lindensis*, sp. nov. Oblonga; sat convexa; pubescens; rufoferruginea, capite prothoraceque piceis; minus fortiter punctulata; prothorace elytris sat angustiori, subquadrato, basi haud marginato, ante basin utrinque fovea obsoleta rotundata

impresso, minus crebre punctulato; elytris sat crebre punctulatis; antennis basi sat distantibus. Long., 1 l.; lat.,  $\frac{3}{10}$  l.

*Var.* capite prothoraceque ferrugineis.

This species is very like the European *A. badia*, Er., from which it differs in its antennæ less approximate at their base, the prothorax not so much narrower than the base of the elytra, and the puncturation of the elytra considerably closer and finer.

South Australia; Port Lincoln district; among fallen leaves.

## LATHRIDIIDÆ.

### CORTICARIA.

*C. australis*, sp. nov. Oblonga; convexa; sat nitida; sat dense (in elytris lineatim) pubescens; fusco-brunnea; antennis (clava excepta) pedibusque dilutioribus; capite prothorace parum angustiori; oculis magnis prominulis; prothorace leviter transverso, crebre sat fortiter (æque ut caput) punctulato, ante basin sat profunde arcuatim impresso, impressione in medio leviter foveata, angulis posticis rotundato-obtusis; elytris quam prothorax vix fere duplo latioribus, vix striatis, puncturarum sat magnarum seriebus crebris instructis, his apicem versus vix obsoletioribus. Long.,  $\frac{4}{5}$  l.; lat.,  $\frac{3}{10}$  l.

Very like the European *C. gibbosa*, Herbst., differing chiefly by the presence of a well-defined round fovea in the middle of the transverse sulcus on the prothorax, and by the closer rows of punctures on the elytra, which are not placed in distinct striæ, and between which the interstices are perfectly flat throughout.

S. Australia and Victoria.

*C. Adelaidæ*, sp. nov. Oblongo-elongata; sat nitida; sat dense (in elytris lineatim) pubescens; testaceo-brunnea; antennarum clava picea; capite prothorace sat angustiori; oculis sat magnis sat prominulis; prothorace sat fortiter transverso, crebre subtilius punctulato, ante basin fovea rotunda instructo, angulis posticis bene determinatis, elytris quam prothorax sat latioribus, subtiliter striatis, striis crebre subtiliter punctulatis, sculptura apicem versus vix obsoletiori. Long.,  $\frac{4}{5}$  l.; lat.,  $\frac{3}{10}$  l.

Resembles the European *C. elongata*, Gyll., differing chiefly in the piceous club of its antennæ, its more strongly punctulate prothorax, the perfectly flat interstices of its elytra, and its somewhat less parallel form.

S. Australia; widely distributed.

*C. Lindensis*, sp. nov. Breviter ovalis; sat nitida; sat dense (in elytris lineatim) pubescens; rufo-testacea; antennis apicem versus obscurioribus; capite quam prothorax parum angus-

tiori ; oculis sat magnis sat prominulis ; prothorace fortiter transverso, crebre fortius subrugulose punctulato, ante basin sat profunde arcuatim impresso, impressione in medio foveata, angulis posticis obtusis ; elytris prothorace fere duplo latioribus, striatis, striis puncturis sat magnis instructis, apicem versus vix obsoletis. Long.,  $\frac{7}{10}$  l. ; lat.,  $\frac{3}{10}$  l.

This species is of the short broad form of *C. curta*, Woll., which it resembles also in respect of sculpture, differing, however, in the strongly marked transverse furrow of its prothorax ; its sculpture is much stronger and coarser than those of the two species described above.

S. Australia ; Port Lincoln district.

*C. Andersoni*, sp. nov. Oblongo-elongata ; sat nitida ; sat dense (in elytris lineatim) pubescens ; supra testaceo-brunnea, subtus piceo ferruginea ; capite prothorace parum angustiori, oculis sat magnis sat prominulis ; prothorace leviter transverso, minus crebre profunde nec subtiliter punctulato, ante basin transversim arcuatim sulcato, angulis posticis rotundatis ; elytris prothorace duplo latioribus, subtilissime striatis, striis subtiliter punctulatis, sculptura apicem versus vix obsoletiori ; antennis pedibusque testaceis, illarum clava vix infuscata. Long.,  $\frac{3}{5}$  l. ; lat.,  $\frac{3}{10}$  l. (vix).

This minute *Corticaria* differs from all the preceding in having a very strongly marked transverse sulcus on the hind part of the prothorax, without any round fovea. The puncturation of the prothorax is also distinctive—rather coarse, but not deep, nor very close.

S. Australia ; Port Lincoln district. Named after my friend, Mr. J. Anderson, of Port Lincoln.

*C. alutacea*, sp. nov. Nigro-picea, antennarum basi pedibusque paullo dilutioribus ; lineari-elongata ; subdepressa ; fere glabra ; alutacea ; capite prothoraceque parce punctulatis, hoc basin versus angustato, ante basin fovea magna profunda impresso, angulis posticis obtusis bene determinatis, lateribus minute nec crebre denticulatis ; elytris pygidio haud plane tegentibus, subtilissime seriatim punctulatis, antennarum clavæ articulis brevibus. Long.,  $\frac{1}{2}$  l. ; lat.,  $\frac{1}{5}$  l. (vix).

This species must be extremely close to *C. subtilissima*, Reitt., but appears to differ from it in having the hind angles of the prothorax very well defined, and the joints of the antennal club different, the basal two being quite strongly transverse, and the apical one elongate-globose—all three of equal width *inter se*. The fine denticulation of the sides of the prothorax is scarcely noticeable without the use of a compound microscope.

S. Australia ; in several localities.

## MYCETOPHAGIDÆ.

## TRIPHYLLUS.

*T. intricatus*, sp. nov. Subovalis, postice angustatus; pubescens; rufo-ferrugineus; elytris 3-fasciatim nigro-notatis; prothorace fortiter transverso, antrorsum fortiter angustato, confuse dupliciter punctulato, postice utrinque impresso, angulis posticis sat acutis; elytris leviter striatis, striis sat fortiter punctulatis, interstitiis vix convexis leviter nec crebre nec subtiliter punctulatis. Long.,  $1\frac{3}{5}$  l.; lat.,  $\frac{4}{5}$  l. (vix).

The dark markings on the elytra are intricate and a little variable. They consist of three zig-zag fasciæ, which do not usually reach the lateral margins (the intermediate fascia does so in some examples), the hinder two, or even all three, being indistinctly connected with each other at their lateral extremities in some examples. One of these fasciæ is basal, and is often reduced to a mere blotch on each side the scutellum; the next is median; the last is ante-apical, but in many specimens is dilated hindward so as nearly to reach the apex itself.

Victoria; a few specimens occurred in fungi on a mountain called Baldi, at an elevation of about 6,000 feet.

## MYCETÆA.

*M. pilosella*, sp. nov. Breviter ovalis; subnitida; pilis erectis sat sparsim vestita; ferruginea; prothorace crebre rugulose minus subtiliter punctulato, intra marginem lateralem vix manifeste costato; elytris minus crebre minus fortiter punctulatis; antennis sat elongatis; metasterno minus brevi. Long.,  $\frac{7}{10}$  l.; lat.,  $\frac{3}{10}$  l.

This minute species is extremely like the European *M. hirta*, Marsh., superficially. It is a little more elongate and (perhaps consequently) its metasternum is not quite so short; its antennæ are a little longer; the lateral costæ of the prothorax are almost obsolete; the hind coxæ are not quite so widely separated; the puncturation of its prothorax is closer, and that of its elytra is both finer and closer. At a casual glance, it might pass for a small form of *M. hirta*.

S. Australia; in fungi near Port Lincoln.

## DIPLOCÆLUS.

*D. angustulus*, sp. nov. Angustus; parallelus; ferrugineus; pilis erectis vestitus; prothorace transverso, retrorsum leviter angustato, sparsim sat fortiter punctulato, utrinque intra marginem leviter bicostato; elytris punctulato-striatis, puncturis subquadratis sat grossis; abdominis segmento basali in medio oblique bistriato; antennarum clavæ articulo 1° quam 2<sup>us</sup> multo angustiori. Long., 1 l.; lat.,  $\frac{3}{10}$  l. (vix).

The elongate parallel form of this little species gives it an appearance very different from that of the European *D. fagi*, Guér., but I cannot find any structural characters to prevent its being placed in the same genus; at any rate, the identity of tarsal and antennal characters, the lateral sculpture of the prothorax, and the oblique striæ of the basal ventral segment diverging hindward from the middle of the front margin are points of resemblance that indicate at least very close affinity between the two insects. The two previously described Australian *Diplocæli* (*ovatus*, Macl., and *piliger*, Reitter), seem to be similar in form to the European species. Herr Reitter says that he has not seen a description of Sir W. Macleay's species, but judges it distinct from his because the name *ovatus* would be unsuitable to the latter. On comparing the descriptions, I should deem it possible that they are identical. In both descriptions the elytra are said to be "strongly punctulate striate," and this character (apart from the shape of the body) will furnish a further distinction from the present insect, in which the elytra are very feebly striate, although the punctures in the striæ are fairly large and strong.

S. Australia; under bark of *Eucalyptus* in various localities.

*D. exiguus*, sp. nov. Minus angustus; minus parallelus; pubescens; ferrugineus; prothorace postice vix angustato, sparsim sat fortiter punctulato, utrinque intra marginem sat fortiter bicostato; elytris vix striatis, striis puncturis sat magnis subquadratis instructis, his apicem versus obsolescentibus; abdominis segmento basali in medio oblique bistriato; antennarum clavæ articulo 1° quam 2<sup>us</sup> paullo angustiori. Long., 1 l.; lat.,  $\frac{2}{3}$  l. (vix).

This species is not at all unlike *D. fagi*, Guér., in miniature; it differs from the preceding (*D. angustulus*) in its wider and less parallel form, and especially in the ninth antennal joint being (as in *D. fagi*) only moderately narrower than the tenth. *D. piliger*, Reitt. (? *ovatus*, Macl.)—the other described Australian species—is said to have the prothorax closely punctured, the elytra differently coloured, &c.

South Australia; near Port Lincoln.

#### DERMESTIDÆ.

##### TROGODERMA.

Two Australian species have been described as members of this genus—*T. riguum*, Er. (from Tasmania), and *T. apicipenne*, Reitter (from "Australia"). The former I am fairly sure that I have not seen, the latter I think I have taken on several occasions. As, however, I am a little doubtful about my identification being correct, it will be wiser not to refer further to Herr Reit-

ter's species beyond saying that the insect which I take to be it is very distinct from all the following, which appear to be new:—

*T. Eyrense*, sp. nov. Ovale (feminis subparallelis); obscure nigro- et fulvo-hirtum; nigrum, antennarum articulis 2-6 tibiis tarsis et elytrorum lateribus apiceque plus minus rufescentibus; obscure sat crebre punctulatum; sulcis antennariis profundis bene determinatis, triangularibus, postice clausis.

Mas. Antennarum clava 5-articulata, quam articuli 1-6 conjuncti multo longiori; horum articulis 2-5 minutis æqualibus, 6° quam 5<sup>us</sup> paullo longiori et sat latiori; clava cylindrica, hujus articulo 1° quam sequentes multo breviori, 2°-4° sat æqualibus, 5° acuminato quam 3<sup>us</sup> 4<sup>us</sup> que conjuncti vix breviori; antennis quam prothorax vix brevioribus.

Femina. Antennis paullo brevioribus; clava quam stipes vix longiori, illius articulo ultimo quam præcedens paullo longiori. Long.,  $1\frac{2}{5}$ — $1\frac{4}{5}$  l.; lat.,  $\frac{4}{5}$  l.—1 l.

It should be noted that the sixth joint of the antennæ is so intermediate in width between the fifth and seventh that it might almost as well be classed with the club (making it six-jointed) as with the stipes. I have reckoned it as belonging to the latter because its *length* is perhaps more harmonious with that association. There is not any *very great* difference between the antennæ of the male and those of the female; in the latter, however, the club being evidently shorter than in the former, and especially the last joint being shorter as compared with the preceding joints. The pilosity of the upper surface is fairly dense and consists of black and greyish or fulvous hairs intermingled.

South Australia; basin of Lake Eyre.

*T. alpicola*, sp. nov. Ovale; obscure nigro- et griseo-hirtum; nigrum, antennarum articulis 2-6 (vel 3-6) tarsis et elytrorum apice rufis; obscure minus crebre punctulatum; sulcis antennariis profundis bene determinatis, triangularibus, postice clausis.

Femina (?). Antennarum clava 5-articulata, quam articuli 1-6 conjuncti haud longiori, articulis 3-6 parvis æqualibus, clava ovali, hujus articulis 1-3 ex ordine latioribus, 4° 3° æquali, 5° quam 4<sup>us</sup> paullo longiori sat angustiori; antennis quam prothorax sat brevioribus. Long.,  $1\frac{3}{5}$  l.; lat.,  $\frac{4}{5}$  l.

Although I think the specimens before me are females, I have no hesitation in describing this species, since the differences between the male and female are but slight in all the species known to me that are closely allied to the present one, consisting chiefly in the females being larger than the males, and having the apical joint of the antennæ—or the whole club of the antennæ—some-

what shorter. Apart from the antennal difference, this insect is extremely close to the preceding, and I do not see much other distinction save in the puncturation being less close, and the tibiae almost as obscure in colour as the femora.

Victoria ; Alpine district.

*T. Adelaideæ*, sp. nov. Ovale, subelongatum ; obscure nigro- et griseo-hirtum ; nigrum, antennarum articulis 3-7 tarsisque rufis ; sat crebre subaspere punctulatum ; sulcis antennariis profundis bene determinatis, triangularibus, postice clausis.

Antennis fere ut *T. Eyrensis* sed maris articulo 6° feminae articulis 6° 7° que minoribus. Long.,  $1\frac{1}{3}$ — $1\frac{1}{4}$  l. ; lat.,  $\frac{2}{3}$  l.

This species is much like *T. Eyrense* in its antennal structure, but owing to the joints immediately preceding the club (and the first joint of the club itself) being smaller, the club has no appearance of being six jointed in the male, and in the female might almost be regarded as only four jointed, and in both sexes is not quite so cylindrical in form. The uniform black or pitchy black colouring (except the tarsi and the middle of the antennæ) will at once separate this insect from the preceding two, and its close subasperate puncturation (not less close and subasperate on the prothorax than on the elytra) will furnish a further distinction.

South Australia ; Adelaide district, &c.

*T. Lindense*, sp. nov. Late ovale ; fulvo-hirtum ; piceo-nigrum ; antennis pedibusque (femoribus vix infuscatis) testaceis, elytris testaceo-brunneis ; capite prothoraceque subtiliter (hoc latera versus crassius), elytris obscure vix crebre punctulatis ; sulcis antennariis profundis bene determinatis, triangularibus, postice clausis.

Mas. (?). Antennarum clava 5-articulata, quam articuli 1-6 conjuncti vix longiori articulis 3-6 parvis æqualibus, clava ovali hujus articulis 1° et 2° parvis fere cum stipite numerandis, 3° et 4° sat magnis inter se sat æqualibus, 5° quam 4<sup>us</sup> paullo longiori vix angustiori. Long., 1 l. ; lat.,  $\frac{2}{3}$  l. (vix).

I believe I have both sexes before me, and that the difference between them is very slight ; in one example the apical joint of the antennæ is certainly shorter and more rounded at the apex than in the other. The seventh and eighth joints of the antennæ are very much smaller than the following three, so that the club might almost be regarded as tri-articulate only ; but on careful examination I think those two joints really belong to the club, being different in form from the preceding four.

The entirely testaceous antennæ will *inter alia* distinguish this little species from all the preceding.

South Australia ; near Port Lincoln.

*T. difficile*, sp. nov. Elongato-ovale; obscure nigro- et griseo-hirtum; nigrum, antennarum articulis 3-7 tarsisque rufis; obscure subcrasse (prothoracis disco multo minus crasse) punctulatum; sulcis antennariis minus profundis, postice clausis, lateribus subparallelis.

Mas. (?) Antennarum clava 4-articulata, quam articuli 1-7 conjuncti haud longiori, articulis 3-7 parvis, clava ovali, hujus articulo 1° parvo, 2° et 3° sat æqualibus, 5° quam 4<sup>us</sup> multo longiori haud angustiori. Long.,  $1\frac{2}{5}$  l.; lat.,  $\frac{7}{10}$  l.

The prosternal sulci in this species differ in form from those of the preceding; they are a little wider and less deep, and instead of the sides of each sulcus converging from its open base (on the front margin of the prosternum) continuously till they meet at the hind angle of the prosternum, they run almost parallel to each other for about half their length, and converge only in their hind portion.

The 3rd and following joints of the antennæ are very closely crowded together, and consequently difficult to count; it is only by examination under a high-power that I have satisfied myself as to their number. As in some of the preceding species, the apportionment of joints to the stem and club is no easy matter. At a glance, the club seems to be 3-articulate, but on examination the 8th joint seems clearly to go with those of the club, being evidently much wider than the preceding—but I cannot look upon the 7th joint as a part of the club. The robust apical joint (not at all narrower than the penultimate) gives the antennæ a very distinct appearance. The puncturation of the elytra also is coarser than usual.

S. Australia; near Port Lincoln.

*T. Macleayi*, sp. nov. Late ovale, postice angustatum; nigro-hirtum; nigrum, antennis tarsis et elytris (macula magna communi discoidali nigra excepta) rufis; obscure vix crebre (prothoracis disco magis subtiliter sat sparsim) punctulatum; sulcis antennariis profundis bene determinatis, triangularibus, postice clausis.

Mas. Antennarum articulis 4-10 pectiniformibus, 3° minuto, 11° compresso-lamelliformi.

Femina. Antennarum articulis 5-10 leviter serratis, 11° ovali apice acuminato. Long.,  $1\frac{1}{3}$ — $1\frac{2}{3}$  l.; lat.,  $\frac{2}{3}$  l.—1 l.

The pectinations of the antennæ of the male increase in length to the seventh joint, those of the seventh, eighth, and ninth being about equal *inter se*, each of them about as long as the basal four joints together of the front tarsi, that of the tenth joint is a little shorter. The apical joint is a compressed somewhat piriform lamella scarcely so long as the tenth joint.

South Australia and Victoria; on flowers.

*T. occidentale*, sp. nov. Ovale ; nigro-hirtum ; piceum, antennis tibiis tarsisque testaceis, elytris rufo-brunneis ; crebre subaspere punctulatum ; sulcis antennariis sat profundis bene determinatis, triangularibus, postice clausis ; elytris abbreviatis.

Femina (?). Antennarum clava elongato-ovali 6-articulata, quam articuli 1-5 conjuncti multo longiori, articulis (apicali quam 10<sup>us</sup> paullo angustiori paullo longiori excepto) ex ordine latioribus.

The third, fourth, and fifth joints of the antennæ are small, and equal or nearly so *inter se* ; the club quite distinctly consists of six joints. I am doubtful of the sex of my unique example, but it is probable that the comparative shortness of the apical joint of the antennæ points to its being a female. The elytra are abbreviated, and separately rounded behind, as in *Thaumaglossa* ; the other characters are of *Trogoderma*.

West Australia ; taken by E. Meyrick, Esq.

*T. Baldiense*, sp. nov. Elongato-ovale, subparallelum ; obscure griseo- et nigro-hirtum ; nigrum, antennis tarsisque testaceis, elytris apicem versus macula magna sanguinea utrinque ornatis ; obscure vix crebre (prothoracis disco magis subtiliter magis sparsim) punctulatum ; sulcis antennariis sat profundis bene determinatis, triangularibus, postice clausis.

Feminae antennarum articulis 6-10 leviter serratis, 11° ovali apice acuminato. Long., 2 l. ; lat., 1½ l.

This species is evidently a near ally of the preceding. My unique example is a female ; its antennæ scarcely differ from those of the same sex in *T. Macleayi*, but the slight internal production of the fifth joint which is distinct in the latter is here not traceable. I have no doubt the antennæ of the male are very like those of *T. Macleayi* (male). The large bright red spot near the apex of each elytron is a very distinctive character.

Victorian Alps ; crawling on snow on a mountain called Baldi.

*T. Yorkense*, sp. nov. Ovale ; obscure nigro- et griseo-hirtum ; nigrum, antennis tibiis tarsisque testaceis, elytris rufo-brunneis ; crebre (prothoracis disco obscure sparsim) punctulatum ; sulcis antennariis latis leviter impressis, parallelis, postice apertis.

Maris (?) antennarum clava 4-articulata quam articula 1-7 conjuncti subbreviori, ovali, articulo (clavæ) 1° quam sequentes multo breviori et angustiori, 2° et 3° inter se sat æqualibus, 5° vix angustiori, quam 3<sup>us</sup> 4<sup>us</sup> que conjuncti vix breviori. Long., 1½ l. ; lat., 1 l.

The distinction between club and stem in the elytra is very indeterminate, and some dilatation is discernible in the seventh

joint; it might be possible therefore to regard the club as five-jointed, but at a casual glance it would pass for being only three-jointed, as the eighth joint is very much narrower and shorter than the ninth. Although this species has altogether the general facies of *T. Eyrense*, *alpicola*, and their allies, it is very widely distinct from them by the entirely different shape of the prosternal sulci, which are shallow (though perfectly well defined), much wider than the reception of the antennæ requires, parallel-sided or nearly so, and open behind.

S. Australia; Yorke's Peninsula.

*T. Meyricki*, sp. nov. Ovale; nigro- et albido-hirtum; nigrum, antennarum basi tibiis tarsisque rufo-testaceis, elytris vix rufescentibus; obscure sat crebre punctulatum; sulcis antennariis latis minus fortiter impressis, antice parallelis postice vix manifeste clausis.

Maris antennarum clava 7-articulata, quam articuli 1-4 conjuncti plus duplo longiori, articulis 1-5 ex ordine latioribus, 6° 5° æquali, ultimo quam 5<sup>us</sup> sat longiori vix angustiori.

Femine antennarum clava 5-articulata, quam articuli 1-6 conjuncti vix longiori articulis 1-3 ex ordine latioribus, 4° 3° æquali, 5° 4° latitudine et longitudine æquali, apice rotundato, Long.,  $1\frac{1}{5}$  l.; lat.,  $\frac{3}{5}$  l.

The different number of joints in the antennal club of the male and female is unusual, but I think the two specimens before me are certainly the sexes of one species.

W. Australia; taken by E. Meyrick, Esq.

*T. antipodum*, sp. nov. Elongato-ovale, sat parallelum; nigro-hirtum; nigrum, tarsiis rufis, elytrorum apice vix rufescenti; subtiliter sat sparsim punctulatum; sulcis antennariis subobsoletis, latis, obliquis, postice apertis.

Maris antennarum clava 7-articulata, quam articuli 1-4 conjuncti duplo longiori, sat cylindrica, articulo 1° quam sequentes sat angustiori, ultimo acuminato quam 10<sup>us</sup> sat longiori. Long.,  $1\frac{1}{5}$  l.; lat.,  $\frac{1}{2}$  l.

The third and fourth joints of the antennæ are very minute, and form a slender connection between the basal two joints (which are robust, as in the rest of the species described above) and the cylindric club. The prosternal sulci are very wide and feeble, being not very noticeable, until in a certain light one sees an oblique track running along them and marking the position of the antennæ in repose.

S. Australia; near Adelaide.

*T. singulare*, sp. nov. Elongato-ovale, sat parallelum; nigro- et griseo-hirtum; fuscopiceum, elytris dilutioribus, antennis tibiis tarsisque testaceis; subtiliter sparsim punctulatum;

sulcis antennariis subobsoletis, latis, obliquis, postice apertis. Maris antennarum clava 7-articulata quam articuli 1-4 conjuncti plus duplo longiori, cylindrica, articulis 1° et 2° quam sequentes sat angustioribus, ultimo leviter acuminato quam 10<sup>us</sup> sat longiori. Long., 1 l.; lat.,  $\frac{1}{2}$  l. (vix).

The third and fourth joints of the antennæ are so minute that they are not very easily observed, and at a glance the antennæ seem to have only nine joints.

This species is very near the preceding, but differs from it (apart from the very different colouring) in the decidedly less stout antennæ and the extreme minuteness of the third and fourth joints of the same. My unique example is considerably abraded, but I can trace indications of the grey pubescence on the elytra, forming two fasciæ, which might perhaps be more distinct in a very fresh specimen.

S. Australia; near Port Lincoln.

The following is a tabulation of the species described above:—

- A. Elytra covering (or nearly so) the hind body.
- B. Prosternal sulci sharply defined, triangular, very deep, and strongly closed behind.
- C. Antennæ testaceous or rufous, unicolorous.
- D. Tibiæ testaceous, elytra unicolorous, antennæ simply clubbed... .. Lindense.
- DD. Tibiæ piceous, elytra red, with a large common basal black blotch, antennæ pectinated or serrate ... .. Macleayi.
- DDD. Tibiæ black, elytra black, each with a large subapical red spot, antennæ serrate (female, probably pectinate in male) ... .. Baldiense.
- CC. Antennæ with at least the club black, or nearly so.
- D. Elytra black, their apex rufous.
- E. Club of antennæ cylindric in both sexes... .. Eyrense.
- EE. Club of antennæ oval (at least in the female)... .. alpicola.
- DD. Elytra entirely black ... .. Adelaidæ.
- BB. Prosternal sulci more feeble, not (or scarcely) closed behind.
- C. Species of oval (non parallel) form, antennal club having less than 7 joints.
- D. Antennæ having at least the club black ... .. difficile.
- DD. Antennæ entirely rufous ... .. Yorkense.
- CC. Species of oval form, antennal club of male 7-jointed ... .. Meyricki.

- CCC. Species of parallel form, antennal club  
of male having 7 joints.
- D. Antennæ entirely rufous ... .. singulare.
- DD. Antennæ having at least the club black antipodum.
- AA. Elytra strongly abbreviated ... .. occidentale

ADELAIDIA, *gen. nov.*

*Trogodermati* affinis sed antennarum clava sat laxe 3-articulata ;  
elytris abbreviatis singulatim rotundatis, propygidio in medio  
aperto ; unguiculis appendiculatis ; sulcis antennariis vix  
perspicuis.

This genus is also near *Thaumaglossa*, which, however, has  
10-jointed antennæ, and distinct prosternal sulci for the reception  
of the antennæ in repose. The antennal club of the species  
before me consists of joints, none of which are distinctly trans-  
verse, the first and third being quite as long as wide, the second  
scarcely wider than long. *Trogoderma riguum*, Er., must be  
superficially very like this species—so much so in fact, that I  
have thought it best to adopt the same specific name.

*A. rigua*, sp. nov. Late ovalis ; pilis erectis nigris et adpressis  
albis vestita ; nigra, antennis pedibusque rufis, prothorace  
ad latera et utrinque ad basin albo-pubescenti, elytris fasciis  
tenuibus 4 et macula apicali parva albopubescentibus  
ornatis (fasciis 1<sup>a</sup> basali 2<sup>a</sup> antemediana, 3<sup>a</sup> postmediana, 4<sup>a</sup>  
subapicali) ; crebre subtiliter subaspere punctulata.

Feminae (?) antennarum articulis 1° 2° que sat magnis, 2-7  
parvis inter se subæqualibus, clava 3-articulata oblonga  
quam articuli ceteri conjuncti multo breviori, illius articulis  
1° 3° que inter se longitudine æqualibus 2° his breviori.  
Long., 2 l. (vix) ; lat., 1 l.

S. Australia.

## CRYPTORHOPALUM.

*C. Australicum*, sp. nov. Late ovale ; pilis crebris (his nigris in  
partibus nigris, rufis in partibus rufis) vestitum ; nigrum,  
subtus vix rufescens, antennis tibiis tarsisque rufis, elytris  
fascia antemediana et macula apicali rufis ornatis ; obscure  
sat crebre (prothoracis disco vix perspicue) punctulatum.  
Long., 1—1½ l. ; lat.,  $\frac{3}{5}$ — $\frac{4}{5}$  l.

S. Australia ; near Port Lincoln.

*C. Woodvillense*, sp. nov. Ovale ; pilis crebris (his nigris in parti-  
bus nigris, testaceis in partibus dilutioribus) vestitum ;  
nigrum vel piceo-nigrum, antennis tibiis tarsisque testaceis,  
elytris fasciis 2 et apice rufo-testaceis ; crebre sat crasse sat  
aspere (prothoracis disco vix perspicue) punctulatum. Long.,  
1 l. ; lat., ½ l.

The sides of the prothorax bear some scattered whitish hairs. The anterior fascia of the elytra is slightly in front of the middle, and is rather wide and much zigzagged; the hinder fascia is a little narrower and less flexuous, and scarcely reaches the suture. In some specimens there is a faint reddish spot on either side of the scutellum.

The above two species appear to differ from those described by Herr Reitter in having conspicuous red or testaceous fasciæ and markings on the elytra, as well as in the pattern being different. In the species of Herr Reitter the markings appear to be caused by differently coloured pubescence on a unicolorous ground; in two of them these markings consist of *three* fasciæ, besides basal and apical spots, while in the other they consist of basal spots and a single median fasciæ.

The present species differs from *C. Australicum* not only in the pattern on its elytra but in its smaller size and much coarser sculpture.

S. Australia; Woodville.

*C. interioris*, sp. nov. Ovale, lateribus parum rotundatis; pilis crebris (his in elytris in partibus nigris albis in partibus dilutioribus, in prothorace albis) vestitum; piceo-nigrum, antennis pedibusque testaceis, femoribus vix infuscatis, elytris maculis magnis testaceis nonnullis ornatis; sat crebre sat subtiliter subaspere punctulatum; antennarum clava minus dilatata, articulis 2 mox pone clavam vix a clava distinctis. Long.,  $1-1\frac{2}{5}$  l.; lat.,  $\frac{1}{2}-\frac{7}{10}$  l.

The comparatively small size of the antennal club and the increase in width of the eighth and ninth joints, making them appear almost as belonging to the club, are perhaps a little inconsistent with this genus, but the club is in other respects quite normal, and all the other characters are as in typical *Cryptorhopalum*. Joints 3-9 of the antennæ are extremely short, 8 and 9 scarcely longer, though evidently wider than the preceding joints; 10 is as long as the preceding three together, and much wider; 11 is very much longer and wider than 10, and is rounded.

The pattern on the upper surface is very intricate. The prothorax is much clothed with longish white hairs. Each elytron bears five large testaceous spots, of which one is close to the scutellum, one behind the shoulder, one near the suture in front of its middle (this and the spot behind the shoulder are in some examples obscurely joined into a fasciæ), one a little in front of the apex on the disc, and 1 at the apex (the apical two are in some examples obscurely joined into a vitta). The white hairs on the elytra are not strictly limited to the testaceous parts, but seem to form an independent pattern in three ill-defined fasciæ

(basal, median and subapical), and are also sprinkled over the apex.

S. Australia; basin of Lake Eyre.

ANTHRENUS.

*A. Musæorum*, Fab. This species is recorded as Australian in Mr. Masters' Catalogue. I have not seen an Australian example of it.

*A. varius*, Fab. Far too plentiful in S. Australian collections; also on flowers. It is not mentioned in Mr. Masters' Catalogue.

*A. australis*, Hope. I have taken in various localities, on flowers, an *Anthrenus* which agrees fairly well with the very brief description of this insect. The only discrepancy is that the elytra are (not black but) dark brown, becoming paler towards the apex; one example has *very* dark brown elytra, which might almost be called blackish, and it may perhaps vary to black. It has the three wavy fascia of white pilosity as described. It has abdominal sulci for the reception of the hind legs, and eleven-jointed antennæ with a three-jointed club.

*A. ocellifer*, sp. nov. Ovalis, lateribus parum rotundatis; confertissime squamis nigris fulvis et albis vestitus, supra squamis fulvis et albis submaculatim dispersis his in illis mediis positus, subtus squamis albis superficiem totam (nisi abdominis latera et apicem fulvo-squamosa) tegentibus; niger, pedibus rufis; crebre sat subtiliter punctulatus; antennis 11-articulatis, clava 3-articulata; pedibus in sulcis receptis. Long.,  $1\frac{1}{3}$ — $1\frac{1}{2}$  l.; lat.,  $\frac{3}{5}$ — $\frac{4}{5}$  l.

The black fulvous and white scales are on the prothorax mixed confusedly; on the elytra they take the form of fulvous spots on a black ground, the middle part of the fulvous spots being white; there are seven or eight spots on each elytron. I do not know any other *Anthrenus* presenting the following characters in combination:—Antennæ eleven-jointed, with a three-jointed club, all the legs received in sulci, antennæ entirely black, legs entirely red, ventral segments without any black spots; body densely scaly.

S. Australia; on flowers.

*A. Flindersi*, sp. nov. Ovalis; obscure nigro- et griseo-hirtus; niger, antennis totis tibiis tarsisque rufis, elytris apice rufescentibus; crebre sat subtiliter (prothoracis disco minus crebre magis subtiliter) punctulatus; sulcis antennariis valde profundis, fere transversim positus, externe subrotundatis; segmento ventrali basali utrinque transversim sulcato.

Maris (?) antennarum clava 3 articulata, articulis 1-8 conjunctis longitudine æquali, articulis 3-8 perbrevibus (7° et 8° paullo latioribus); clava cylindrica, hujus articulo 2° quam

ceteri sat minori, articulo apicali apice rotundato-angustato.  
Long.,  $1\frac{1}{5}$  l. ; lat.,  $\frac{3}{5}$  l.

Feminae (? hujus speciei) antennarum articulo apicali quam  
9<sup>us</sup> sat breviori (elytris fasciis albopilosis 2 instructis, altera  
basali altera antemediana, his secundum suturam conjunctis).  
Long.,  $1\frac{1}{5}$  l. ; lat., 1 l.

The prosternal sulci of this insect are very deep, run obliquely (or almost transversely) across the front portion of the prosternum, their extremity being on the lateral margin considerably in front of the hind angles of the prosternum, and are rounded at their extremity (as in *A. Muscorum*).

I hesitate to refer the female described above to this species, on account of its very much greater size, the somewhat conspicuous fasciæ on its elytra, and the less clearly testaceous colour of its antennal club. The male example described above is, however, certainly abraded, and may have had the elytral fasciæ when fresh. It may be distinguished from the species I take for *A. australis*, Hope, apart from colour, by the much larger club of its antennæ.

S. Australia ; near Port Lincoln, the male on flowers of *Hakea*.

#### BYRRHIDÆ.

##### BYRRHUS.

The following species is evidently congeneric with that which I described in Trans. Roy. Soc., XII., p. 138, as *B. Torrensensis*, although the tarsi are still less contractile. I drew attention (loc. cit.) to the feebleness of the tibial channels in that species. In the present insect the tarsi do not appear to be laid back in repose altogether *against* the tibiæ, but to be so placed that their base is in a groove at the apex of the tibiæ, and their apical joints are free. This character is inconsistent with *Byrrhus*.

*B. raucus*, sp. nov. Subglobosus ; nitidus ; subfortiter (prothorace crebre, elytris minus crebre) punctulatus ; pilis nigris erectis perlongis crebre vestitus ; supra æneus subcuprascens, antennis tarsisque rufescentibus ; subtus niger, crebre fortiter rugulose punctulatus. Long.,  $1\frac{2}{5}$  l. ; lat., 1 l.

Very like *B. Torrensensis*, but more globose, clothed with longer hair, differently coloured, the prothorax more strongly punctured, the underside black or nearly so, and much more strongly and roughly punctulate.

Victoria ; in the Alpine district.

#### HETEROCERIDÆ.

##### HETEROCERUS.

*H. Victorie*, sp. nov. Elongato-oblongus ; sat nitidus ; griseo-pubescentis ; piceo-niger, prothoracis lateribus elytrorum notis

- numerosis tibiis intus tarsis et mandibulis rufis; prothoracis angulis posterioribus marginatis; elytris creberrime minus subtiliter sat aspere punctulatis, sat perspicue striatis. Long., 2 l.; lat.,  $\frac{3}{5}$  l.

The markings on the elytra are well defined and intricate; they consist of an irregular red lateral border scarcely reaching the base or apex; from this a branch runs off behind the shoulder towards the suture, which on the middle of the disc turns upward and reaches the base, along which it runs a short distance towards the scutellum, and then turns down again, running somewhat parallel to (and close beside) the suture to about a third the length of the elytron; the red lateral margin gives off another branch behind its middle, which runs obliquely forward almost to the hind extremity of the front branch, and is in the form of two triangles having their apices directed hindward and their bases in a continuous line; between this hind branch and the apex there is an elongate red spot.

This species is extremely like the European *H. marginatus*, Fab. Compared with that insect it is a little narrower and less robust, with prothorax scarcely so strongly punctulate and elytra very evidently striate. The puncturation of the elytra is scarcely different. The prothorax is a little more narrowed both in front and behind, and has more strongly rounded sides, but is scarcely less transverse.

Compared with *H. Flindersi*, Blackb., this insect has much more closely punctulate elytra, while from *H. Australasiae*, Waterh., and *H. multimaculatus*, Blackb., it differs *inter alia* in not having the elytra perceptibly narrowed behind the shoulders. Victoria; Alpine district.

- H. indistinctus*, sp. nov. Elongato-oblongus; minus nitidus; griseo-pubescentis; piceo-niger, prothoracis lateribus elytrorum notis numerosis tibiis intus tarsis femoribus et mandibulis pallide testaceis; prothoracis angulis posterioribus marginatis; elytris vix perspicue striatis, crebre sat subtiliter vix aspere punctulatis. Long., 2—2 $\frac{1}{5}$  l.; lat.,  $\frac{7}{10}$ —1 l.

This species is undoubtedly very close to the preceding, but I cannot regard it as a mere variety.

The markings on the elytra, from some points of view, are entirely concealed by the pubescence; they are as follows on each elytron:—A marginal band widely continued to both base and apex, which is dilated in a kind of blotch scarcely in front of the middle, and again immediately behind the middle; two elongate spots almost side by side on the disc a little in front of the middle; a spot of variable form (bifid in some examples) on the disc just behind the middle (in some examples this spot is connected with

the external of the two anterior spots, and in some with the hinder dilatation of the pale margin); an elongate subapical spot.

The present insect differs from *H. Victoriae* in colour, the lighter parts being pale yellow instead of rufous, and the femora being testaceous instead of blackish, also in its non-striate elytra (in most examples they are non-striate, in some there is a scarcely perceptible indication of striæ) and in the distinctly finer, less rugulose, and less close puncturation of the elytra; the spines on the anterior tibiæ are more numerous, being nine or ten, while in *H. Victoriae* they number only seven or eight. Compared with *H. Flindersi* the elytra are considerably more closely punctured; and the elytra not (or scarcely) narrowed behind the shoulders will separate it from *H. Australasica* and *H. multimaculatus*. In some specimens (probably males) the prothorax is less transverse than in others.

Victoria; on the banks of the river Ovens.

*H. Flindersi*, Blackb. The puncturation of the elytra in this species is scarcely distinguishable from that in the European *H. femoralis*, Kiesenw.

#### LAMELLICORNES

##### ATÆNIUS.

*A. speculator*, sp. nov. Minus angustus; minus parallelus; minus nitidus; setis erectis pallidis brevissimis vestitus; niger, clypei margine prothoracis margine antico palpis antennis pedibusque rufescentibus; capite subtilius densissime punctulato (puncturis in rugis longitudinalibus confusis), clypeo antice sat fortiter rotundato-emarginato; prothorace crebre ruguloso-punctuato, fortiter transverso, angulis posticis plane rotundatis; elytris striatis, interstitiis convexis obscure asperato-granulatis. Long., 2 l. (vix); lat.,  $\frac{4}{5}$  l.

Differs from *A. australis*, Har., by its less narrow, less parallel form, its pale setæ, scarcely costiform elytral interstices, prothorax much more narrowed hindward, and with scarcely any trace of a dorsal sulcus, &c., &c. The species described by Sir W. Macleay as *Ammæcii* are stated by the Baron de Harold to be (at least some of them) *Atæni*. They are from N. Queensland and N. W. Australia. None of them are described as being clothed with pale setæ. *A. granulator*, Har. from New Guinea, appears to be very near the present species, but to be somewhat larger, the clypeus subtruncate, &c.

In this species the humeral spine is small, but very well-marked, and more directed outward than in *A. australis*, Har.

Victorian Alps.

*A. Palmerstoni*, sp. nov. Minus angustatus; minus parallelus; minus nitidus; ater, pedibus piceis (anticis rufescentibus),

antennis testaceis; capite subtilius creberrime punctulato, clypeo antice rotundato-emarginato; prothorace fortiter sat crebre subrugulose punctulato, fortiter transverso, lateribus sat parallelis, angulis posticis dentatis; elytris late sulcatis, sulcis intus seriatim granulatis, interstitiis anguste costatis, humeris fortiter spiniformibus. Long.,  $2\frac{1}{2}$  l.; lat., 1 l.

The hind angles of the prothorax are very peculiar, being strongly dentiform; behind the tooth-like projection the sides run evenly round hindward, so that the hind part of the prothorax is in the form of a distinct wide lobe.

N. Territory of S. Australia.

ANOPLOGNATHUS AUREUS, *Waterh.*

From the "Zoological Record" for 1889, received a few weeks ago, I learn that this species was described in the "Ann. and Mag. of N. Hist." for Oct., 1889. It must be very like (as regards size, colour, &c.) my *Calloodes Frenchi*, described in a paper read before the Linnæan Society of N.S. Wales in March, 1890; but I think the statement in describing *A. aureus* that its elytra have "only one or two lines of punctures at the sides," and that their "margins are not reflexed in the middle," is conclusive as to the two being distinct. As remarked in a previous paper of this series, I cannot regard *Calloodes* as really distinct from *Anoplognathus*, although the name is convenient if it be regarded as that of a subgenus founded on merely superficial characters.

BUPRESTIDÆ.

CHALCOPHORA.

- C. Frenchi*, sp. nov. Splendide viridis, cyaneo-micans; capite longitudinaliter excavato et in medio carinato (carina anterior sum furcata); prothorace fortiter subcrebre vermiculatn-ruguloso, utrinque basi longitudinaliter impresso, linea dorsali irregulari elevata; elytris costatis fere ut *C. superba*, Saund. (sed costa suturali fere recta, submarginali plane ad apicem producta), apice subtruncatis, margine laterali postice denticulato, apice suturali spiniformi; corpore subtus crasse ruguloso; antennis obscure cyaneis, articulis basalibus 2 viridibus. Long., 22 l.; lat., 8 l.

A magnificent species of brilliantly metallic colour, varying from green to cyaneous or purple, according to the light in which it is looked at. It is nearly allied to *superba*, Saund., from which it differs (apart from colour) as follows:—The prothorax is much more closely and evenly vermiculate (almost exactly as in *gigas*, Hope), and has a very distinct longitudinal impression running forward from the base a little nearer to the lateral margin than to the middle on either side (I do not know any other Australian

species of *Chalcophora* in which this character is so well marked); the elytra are very much less narrowed off at the apex, and their costæ are a little differently arranged, that next the suture being parallel to the suture (in *superba* the same costa is very strongly curved a little before the apex), and that nearest the lateral margin being continued quite to the apex; the costæ, moreover, are subobsolete near the base. On the undersurface the sculpture is very much coarser, the vermiculate smooth elevations occupying a much larger proportion of the area as compared with the depressed closely punctured spaces; the prosternum is concave longitudinally between the coxæ (in *superba* it is convex), and the basal ventral segment (the specimens before me seem to be of the same sex, probably female), is much more narrowly concave down the middle, the apical ventral segment being narrowly sinuate-truncate at the apex (it is not much different in same sex of *superba*, but in the unique example before me is slightly chipped, and therefore I cannot be quite certain). The concavity of the prosternum will, I think, distinguish this species from all its near allies (*i.e.*, *gigas*, Hope, *Waterhousei*, Masters, and *superba*, Saund.); its colour also is completely distinctive, and from *Waterhousei* it may be known by its prothorax and elytra non-pubescent.

N. Queensland; in the collection of C. French, Esq.

#### STIGMODERA.

*S. tibialis*, Waterh. Mr. Tepper, of the S. Australian Museum, has lately shown me a very fine series of this insect, which has lately been placed in the Museum by Mr. C. F. Johnson, M.P. They were taken in W. Australia (near York), where, I do not think, there has been any record of the species occurring. *S. tibialis* is evidently extremely variable, as I find the elytra of some specimens entirely yellowish red, of others entirely dark red, and of others dark red, with two or more more or less defined paler fasciæ. In some examples the ventral segments are more or less spotted with yellowish. Among all these varieties I do not find any approximation to *S. Stevensi*, Gehin, in respect of the colouring of the sides of the prothorax, but the acuteness of the angulation on the intermediate tibiæ (which is said to be a distinguishing character) is very variable in degree, and I am afraid an examination of the specimens before me suggests inevitable doubt as to the validity of Mr. Waterhouse's species.

*S. princeps*, sp. nov. Femina. Sat late oblonga, minus convexa; nigra, vix ænea, prothorace plus minus piceo-rufescenti, elytrorum lateribus (parte antica excepta) anguste (et apice late) sanguineo-marginatis; capite vix concavo, minus fortiter sat crebre (ut *S. parricollis*) punctulato; prothorace

trans basin quam longiori vix dimidio (postice quam antice duplo) latiori, crasse confuse (indisco sat sparsim, quam *S. parvicollis* multo minus crebre) punctulato, margine antico bisinuato postico in medio (ut *S. parvicollis*) lobato, lateribus a basi ad medium fere parallelis; elytris (fere ut *S. parvicollis*) valde striatis, interstitiis convexis subtiliter sat sparsim punctulatis, apicibus simplicibus; sternis in medio sparsissime sat fortiter, latera versus sat crebre acervatim (prosterno crassissime rugulose) punctulatis; abdomine nitidissimo fere lævigato, segmentis basali apicalique et ceterorum partibus lateralibus puncturis raris instructis. Long., 20—24 l.; lat.,  $7\frac{1}{2}$ — $8\frac{1}{2}$  l.

The general appearance (in respect of colour and markings) is suggestive of *S. grandis*, Don., but the prothorax is more or less reddish and without a pale margin, the elytral pale margin begins more or less behind the base and is confined in front to the narrow edging outside the outermost stria (the next interstice being included from the middle or thereabouts), and the apex (about the apical one-fifth or one-sixth part of the whole elytra) is sanguineous).

In all other respects this species is extremely close to *S. parvicollis*, Saund., from which it scarcely differs otherwise, except as follows:—It is much larger and distinctly wider, the prothorax is evidently larger in proportion to the other parts (its anterior narrowing commencing evidently further from the base) and is much less closely sculptured; on the undersurface (in the same sex) the sides of the metasternum and the ventral segments are much less closely sculptured.

In all probability, the male differs from the female as in *parvicollis*, having the undersurface much more closely sculptured, and the apical ventral segment much shorter and subtruncate.

W. Australia; taken by J. C. F. Johnson, Esq.

*S. rectipennis*, sp. nov. Sat angusta, sat parallela; nigra, vix cyanea, elytrorum lateribus anguste (et apice late) sanguineo-marginatis, prothorace (in angulis posticis) et abdomine nonnullis exemplis sanguineo-notatis; capite longitudinaliter late concavo minus fortiter sat crebre (ut præcedentis) punctulato; prothorace trans basin quam longiori dimidio (postice quam antice fere duplo) latiori, confuse sat rugulose sat crebre (disco postice nec crebre rugulose) punctulato, margine antico bisinuato postico in medio late sat fortiter lobato, lateribus a basi fere ad medium subparallelis; elytris post humeros vix sinuatis, valde striatis, interstitiis vix perspicue punctulatis, ( $6^{\circ}$  toto  $7^{\circ}$   $8^{\circ}$  que antice confusis rugulosis), apicibus late leviter emarginatis, biacutis; corpore subtus sat hirsuto, sat fortiter sat crebre subæqualiter

(prosterno metasterno et in femina segmento 1° basali in medio sparsius subtilius, prosterni lateribus crassius) punctulato.

Maris segmento ventrali apicali late leviter emarginato, feminae truncato. Long., 15 l.; lat.,  $5\frac{1}{2}$ —6 l.

This species is distinguishable from all others known to me of the genus by the elytra being scarcely sinuate behind the shoulders; in *S. macularia*, Don., the elytral sinuation is slight, but in the present insect it is less marked still. I have seen two males and two females; both the former have the apical ventral segment bright red, and one of them has the penultimate red and the antepenultimate spotted with red, while the other has merely the penultimate spotted with red; of the females one has the hind body entirely black while the other has the apical segment spotted. The female with the hind body entirely black has the prothorax also entirely black, in the other three examples before me at least the hinder part of the lateral margin of the prothorax is red.

W. Australia; taken by J. C. F. Johnson, Esq.

*S. imperator*, Thoms. There can be no doubt, I think, that this is another name for *S. Murrayi*, Gemm. and Har., which was substituted in 1869 for *S. trifasciata*, Murr., a preoccupied name. Thomson's name was published in 1878, and therefore becomes a synonym.

#### TENEBRIONIDÆ.

##### CÆDIOMORPHA.

*C. australis*, Blackb. In describing this species (Trans. Roy. Soc. S.A., 1887, p. 272) I accidentally omitted to state the size; it is, long., 2 l.; lat.,  $1\frac{3}{8}$  l.

##### LINDIA.

*L. angustata*, Blackb. In describing this species (Trans. Roy. Soc. S.A., 1887, p. 275) I accidentally omitted to state the size; it is, long., 2 l.; lat.,  $\frac{1}{2}$  l.

##### PLATYDEMA.

*P. obscurum*, Blackb. (Proc. L.S., N.S.W., 1888, p. 1,430). Mr. G. C. Champion—a well-known English authority on the *Tenebrionidae*—has kindly drawn my attention to the fact that this was a pre-occupied name; I therefore propose *T. Championi* as a substitute.

##### PHYTOPHAGA.

*Prasonotus morbillosus*, Chap. This name having been preoccupied by Mr. Baly, I propose *Chapuisi* as a substitute.

##### CRYPTOCEPHALUS.

*C. consors*, Boisd. I have recently seen an example of this

species sent to me by Mr. Olliffe for inspection, in which the yellow elytral margin is absent. This agrees with Boisduval's description. Suffrian (Mon. XIII., p. 103) seems to think that the yellow margin was accidentally overlooked by Boisduval, and re-describes the insect as having it. In all other respects the example I am referring to seems to agree with specimens having the yellow border.

## EDUSA.

This genus was originally formed by M. Chevrolat, and published in M. Dejean's Catalogue (1837), but M. Lefèvre in 1885 proposed to substitute *Edusia*, on the ground that *Edusa* was a nom. præocc, having been used by Albers in 1860 for a genus of *Mollusca*. It is difficult to understand the reason of this proposal, especially as *Edusa* was recognised and in use in the *Coleoptera* before 1860 by others than its author, M. Bohemann, for example, having used it in 1858 for species that M. Lefèvre now calls *Edusia*. The species attributed to the genus differ considerably *inter se* in respect of facies and structure, in consequence of which Dr. Chapuis in 1874 (Gen. Col., vol. X.) proposed to adopt three names—*Edusa*, *Edusina*, and *Edusella*—as marking three subgenera of *Edusa*. I do not think that this subdivision can be maintained, at any rate unless a number of other subgenera be added; I have a large number of species before me, not half of which will fit exactly into any of those Dr. Chapuis characterised. I shall therefore not attempt to apportion any of the new forms among subgenera beyond remarking that the first six evidently would fall into the subgenus *Edusa*, and that *E. aenea* and *minor* might probably fall in *Edusina*. *E. suturalis*, Chap., is the only species I have seen that agrees with the description of *Edusella*. The "Groupe *Edusites*" of Chapuis is characterised among the *Eumolpida* by the following in combination:—Prosternal episterna convex in front, elytra transversely wrinkled. In this group, *Edusa* was the only Australian genus known to Dr. Chapuis, and he separated it from those of other countries primarily by its being pubescent. The Rev. H. Clark had, however, characterised two other genera—*Thaumastomerus* and *Ocnus*—from N.W. Australia, but in such terms that Dr. Chapuis could not satisfy himself even as to the "groupe" in which they should be placed; he could see no reason, however, to say that they might not be merely somewhat aberrant species of *Edusa*. It should not be overlooked, nevertheless, that Dr. Baly has since appeared to recognise *Ocnus* as a good genus, having attributed to it a new species from N.W. Australia. I have not seen any *Edusites* from N.W. Australia, or any species that seems to me likely to belong to either of the Rev. H. Clark's genera if they are distinct from *Edusa*. In 1885 M. Lefèvre formed a new genus of

*Edusites* under the name *Cleptor*, which, however, does not seem to differ from *Edusa* by any very striking character. Apparently, *Cleptor* has the eyes entire (instead of "obsoletely sinuate within"), the antennæ shorter, with the apex thickened; the body glabrous, the prosternum transverse, the femora unarmed, and the tibiæ longitudinally sulcate; these are all the points of difference I can discover. I have not seen any species in which all of them are to be found, but one or more characterise a good many species which I cannot separate from *Edusa*, and I think they are all discoverable in some or other of the series in my collection. In 1889 I formed a new genus of *Edusites* under the name *Edusoides*, distinguished by its tibiæ being produced laterally at the apex into an elongate horizontal process in both sexes; I have seen no other species presenting any indication of this character.

My conclusion therefore is that I am unable to find any well-marked and constant character (except in the case of *Edusoides*) by which to break up *Edusa* even into subgenera, and I accordingly apply that name to all the Australian *Eumolpidæ* known to me possessing the following characters in combination:—Prosternal episterna convex in front, elytra transversely wrinkled at the sides, tibiæ not externally prolonged at the apex into a horizontal process. The following characters in addition are present in all the species known to me:—Tibiæ not emarginate externally near the apex, anterior femora very rarely altogether simple, the basal joint of at least the anterior tarsi dilated in the male, claws divaricate and appendiculate, the sexes differing *inter se* in the structure of the basal ventral segment. I may add that I think a better anatomist than myself might probably discover generic differences that I have not observed.

The following is a tabulation of the new species described below, together with such others of the *Edusæ* as I have identified. I do not think that I have seen any of the species from N.W. Australia which the Rev. H. Clark described, and the absence from his descriptions of reference to structural characters renders it impracticable to place those species (without having seen them) in a tabulation. A similar remark would apply to the species described by Germar and Bohemann as having the anterior femora unarmed; I have not seen any of these three, and the descriptions do not state whether the femora are angulate or rounded beneath. There remain unknown to me besides the above *E. puberula*, Bohem., from Sydney (which seems to be near my *E. bella*, but to have the clypeus entirely testaceous, and the antennæ shorter), and *E. viridicollis*, Lef. (which appears to be a large species with dense pubescence, and the posterior tibiæ of the male incurved at the apex, characters I have not seen in combination).

It should perhaps be added that the antennæ are usually slender filiform, and not very much shorter than the body. As they appear to vary a little in length sexually, I have not found them very useful for specific characters, and have not made special mention of them in my descriptions, except in a few cases where their structure is exceptional.

- A. Upper surface more or less pubescent or setiferous.  
 B. The elytral vestiture consists of setæ or fascicles of setæ about the sides and apex.  
 C. Front angles of prothorax (at least fairly) well defined.  
 D. The elytral setæ forming fascicles.  
 E. The femora testaceous.  
 F. The prothorax very closely and roughly punctulate ... varipes, Boisd.  
 FF. The prothorax not closely or roughly punctulate distincta, Blackb.  
 EE. The femora entirely blackish spinicollis, Blackb.  
 DD. The elytral setæ not forming fascicles.  
 E. The prothorax not very closely punctured nor much wrinkled transversely.  
 F. The scutellum punctured and scarcely nitid.  
 G. Hind tibiæ of male strongly incurved at the apex ... varians, Blackb.  
 GG. Hind tibiæ of male simple minor, Blackb.  
 FF. Scutellum nitid lævigata ... Froggatti, Blackb.  
 EE. Prothorax very closely punctured and much wrinkled transversely ... chrysuræ, Germ.  
 CC. Front angles of prothorax quite rounded off ... diversicollis, Blackb.  
 BB. The elytral vestiture evenly distributed, and in general much finer.  
 C. Upper surface more or less metallic.  
 D. Anterior femora simply rounded beneath ... inermis, Blackb.  
 DD. Anterior femora widely angulate, but not with a distinct tooth.  
 E. Elytra set with erect hairs ... pavens, Blackb.  
 EE. Elytra with adpressed pubescence only ... Meyricki, Blackb.  
 DDD. Anterior femora with a well-defined tooth.

- E. Elytra with well-defined vittæ of whitish pubescence; prothorax and elytra unicolourous otherwise.
- F. Femora testaceous ... .. lineata, Blackb.
- FF. Femora blackish ... .. aenea, Blackb.
- EE. Species not marked and coloured as "E."
- F. Hind femora rounded beneath.
- G. Elytra set with longish erect hairs.
- H. Prothorax nearly twice as wide as long ... .. pilifera, Blackb.
- HH. Prothorax much less than twice as wide as long ... .. fraterna, Blackb.
- GG. Elytra devoid of longish erect hairs.
- H. Upper surface entirely green.
- I. Puncturation extremely fine, and not asperate ... .. glauca, Blackb.
- II. Puncturation much stronger and asperate bella, Blackb.
- HH. Upper surface not entirely green.
- I. Tooth on anterior femora exceptionally small.
- J. Elytra with well-defined lines of whitish pubescence perplexa, Blackb.
- JJ. Elytra uniformly pubescent ... .. suaveola, Germ.
- II. Tooth on anterior femora normally large ... .. leta, Blackb.
- FF. Hind femora dentate ... .. hirta, Blackb.
- CC. Upper surface not metallic ... .. suturalis, Chap.
- AA. Upper surface glabrous.
- B. Prothorax dentate laterally ... .. singularis, Blackb.
- BB. Prothorax unarmed ... .. glabra, Blackb.
- E. chryswra*, Germ. Minus brevis; nitida; sparsim pilosa, pilis in elytris haud fasciculatis; supra laete metallica, colore

variabilis; antennarum articulis 1-4 testaceis (1° supra viridi excepto), 5° 6° que ad apicem infuscatis, 7-11 (nonnullis exemplis 7° ad basin excepto) piceis; corpore subtus æneo-vel nigro, griseo-pubescenti; femoribus æneis; tibiis testaceis, harum apice tarsisque infuscatis; palpis basi testaceis apice piceis; prothorace quam longiori multo latiori, antice minus angustato crebre rugosule punctulato et transversim fortiter strigato, lateribus regulariter rotundatis, basi bisinuata, margine antico bisinuato in medio sat producto, angulis obtusis, posticis certo adspecto subdentatis, scutello crebre nec profunde punctulato; elytris quam prothorax quarta parte latioribus, fere ut prothorax sculpturatis sed etiam magis fortiter transversim rugatis; prosterno et mesosterno inter coxas valde (et inter se æqualiter) latis.

Mas. Tarsorum anticorum et intermediorum articulo basali fortiter dilatato subovali; abdomine pilis erectis sat longis insigni, segmento 1° ventrali in medio planato-elevato, parte planata glabra subtilissime transversim strigata; tibiarum posticarum parte tertia apicali deformi introrsum valde incurva, spina apicali nulla. Long.,  $3\frac{3}{4}$ —4 l.; lat.,  $1\frac{3}{4}$ —2 l.

The prothorax is about three-fifths again as wide as long.

S. Australia; common.

*E. varians*, sp. nov. Subelongata; nitida; sparsim pilosa, pilis in elytris haud fasciculatis; supra læte metallica, colore fere ut *E. chrysuræ* sed tibiis ad apicem vix picescentibus; prothorace fere ut *E. chrysuræ* sed minus fortiter transverso, multo minus crebre nec rugosule punctulato, haud distincte transversim rugato; scutello punctulato; elytris fere ut *E. chrysuræ*; prosterno et mesosterno inter coxas minus latis.

Mas. Tarsis fere ut *E. chrysuræ* sed anticorum articulo basali breviori; abdomine pilis longis erectis insigni, segmento ventrali basali in medio planato transversim subtilissime strigato haud elevato; tibiis posticis ad apicem fortiter abrupte incurvis, ad apicem exteriorum spina armatis. Long.,  $3\frac{1}{2}$  l.; lat.,  $1\frac{3}{4}$  l.

The prothorax is scarcely more than half again as wide as long.

S. Australia; common near Port Lincoln.

*E. diversicollis*, sp. nov. Elongata; nitida; sparsim pilosa, pilis in elytris haud fasciculatis; supra læte metallica, colore fere ut *E. chrysuræ*; prothorace quam longiori vix dimidio latiori, subtiliter sat sparsim punctulato, lateribus valde rotundatis, margine antico antorsum fortiter æqualiter convexo, nullo modo (basi vix) bisinuato, angulis vix manifestis;

scutello vix punctulato ; elytris quam prothorax tertiâ parte latioribus, fere ut *E. chrysuræ* sculpturatis sed paullo minus crasse ; prosterno et mesosterno inter coxas minus latis.

Mas. latet. Long.,  $3\frac{1}{2}$  l. ; lat.,  $1\frac{3}{5}$  l.

Very distinct by the front margin of the prothorax being absolutely without sinuation, even at its outer extremities. In the absence of the male I cannot be certain that this species should be placed in this section.

Australia ; I do not know the exact habitat of this species.

*E. Froggatti*, sp. nov. Minus elongata ; nitida ; sparsim pilosa, pilis in elytris haud fasciculatis ; supra læte metallica, colore fere ut *E. chrysuræ* sed tibiis apice vix infuscatis et antennarum articulis omnibus (basin versus utique) testaceis vel piceo-testaceis ; prothorace quam longiori circiter dimidio latiori, fortiter minus crebre punctulato, lateribus sat fortiter rotundatis, margine antico ad latera sinuato in medio antrorsum læte fortiter convexo, basi bisinuato, angulis anticis distinctis posticis certo adspectu dentatis ; scutello haud punctulato elytris fere ut *E. chrysuræ* (sed manifeste—præsertim postice—minus crasse) sculpturatis ; prosterno et mesosterno inter coxas sat latis ; femoribus posticis vix dentatis.

Mas. latet. Long.,  $3\frac{1}{5}$  l. ; lat.,  $1\frac{3}{5}$  l.

The lævigata nitid scutellum furnishes a very distinctive character.

N.S. Wales ; taken by Mr. Froggatt in the Blue Mountains.

*E. spinicollis*, sp. nov. Ovalis ; nitida ; sparsim pilosa, pilis in elytris fasciculatis ; supra læte metallica ; colore ut *E. chrysuræ* ; prothorace quam longiori dimidio latiori, antice leviter angustato, crebre rugosule punctulato et transversim sat fortiter strigato, lateribus regulariter rotundatis, basi margineque antico bisinuatis, angulis anticis spiniformibus posticis obtusis ; scutello sat fortiter punctulato ; elytris fere ut prothorax sculpturatis sed magis fortiter transversim rugatis ; prosterno et mesosterno inter coxas valde latis.

Mas. Tarsorum anticorum et intermediorum articulo basali modice dilatato ; abdomine haud pilis erectis vestito, segmento basali in medio elevato planato, parte planata subtilissime transversim strigata ; tibiis posticis apice minus fortiter incurvis. Long.,  $3\frac{1}{5}$  l. ; lat.,  $1\frac{3}{5}$  l.

Extremely like the species which I take to be *E. varipes*, Boisd. ; indeed, I regard it as possibly an extreme Alpine form of that insect, which differs from the present one by its entirely testaceous antennæ, and its legs also testaceous, except the infus-

cate apex of the tarsi, as well as by its prothorax very evidently wider at the base as compared with the width of the base of the elytra. *E. varipes* (?) moreover is nearly always of an obscure brassy colour above, whereas all the examples I have seen of the present species are bright blue or green, or coppery red. I may add that the description of *E. varipes* is so defective that it is little more than a guess to attribute any insect to it. The brassy colour and fasciculated elytral pilosity are the only distinctive characters mentioned, and the colour of the legs and antennæ, the size, and the sexual characters are all omitted. *E. varipes* (?) is found in N.S. Wales.

Victoria; in the Alpine district.

*E. distincta*, sp. nov. Modice elongata; nitida; sparsim pilosa, pilis in elytris fasciculatis; supra læte metallica; colore ut *E. chrysuræ* sed pedibus (tarsis apicem versus exceptis) antennisque (articulis 1° supra ceterisque ad apicem summum, exceptis) testaceis; prothorace quam longiori fere duplo latiori, antice leviter angustato, fortius minus crebre punctulato, lateribus leviter arcuatis, basi valde (margine antico leviter) bisinuata, angulis omnibus distinctis vix acutis; scutello punctulato; elytris crebre fortiter punctulatis et fortiter transversim rugatis (fere ut *E. chrysuræ*).

Mas. Latet.

Much like *E. varians*, but distinguished *inter alia* by its flavescens femora, very strongly transverse prothorax, and much more roughly punctured elytra.

Victoria; Alpine district.

*E. minor*, sp. nov. Modice elongata; nitida; sparsim pilosa, pilis in elytris haud fasciculatis; supra læte metallica, colore fere ut *E. chrysuræ* sed tibiis apice vix infuscatis; prothorace quam longiori paullo plus tertia parte latiori, cetera ut *E. Froggatti*; scutello obscure punctulato; elytris fere ut *E. chrysuræ* sed postice minus fortiter sculpturatis; prosterno et mesosterno inter coxas sat latis; femoribus posticis vix dentatis.

Mas. Fere ut *E. chrysuræ*, sed segmento basali ventrali in medio haud elevato, tibiis posticis apice haud intus curvatis

Femina latet. Long.,  $2\frac{2}{5}$  l.; lat.,  $1\frac{2}{5}$  l.

Very like *E. Froggatti*, but considerably smaller, with the prothorax less transverse, and the front part of the elytra very much more roughly sculptured; the sexual characters of the male also are probably different.

S. Australia.

*E. ænea*, sp. nov. Ovalis; sat parallela; pube grisea vestita, hac in elytris circiter 6-seriatim longitudinaliter disposita;

obscuræ ænea, labro antennarum femorum tibiatarumque basi rufis, antennarum articulis apice piceis, clypeo antice scutelloque viridibus; capite prothoraceque opacis coriaceis obsolete punctulatis; hoc quam longiori plus dimidio latiori, antice parum angustato subtruncato, lateribus leviter arcuatis, basi vix bisinuata, angulis obtusis; scutello crebre aspere punctulato; elytris subnitidis, vix substriatis, basin lateraque versus subrugosule punctulatis et obscure transversim rugatis alibi crebre subtiliter nec rugosule punctulatis.

Mas. Tarsorum anteriorum 4 articulo basali fortiter dilatato; tibiis posticis apice abrupte breviter incurvis; segmento ventrali basali in medio planato glabro nitido fere impunctulato. Long.,  $2\frac{1}{3}$  l.; lat., 1 l.

Victoria; Alpine district.

*E. perplexa*, sp. nov. Ovalis, subparallela; pilis fulvis vestita, his in elytris lineis crebris dispositis; capite prothorace scutelloque opacis coriaceis vix manifeste punctulatis læte viridibus; elytris obscure aureo-olivaceis, labro palpis antennarum (harum articulis plus minus nigro-terminatis) pedibusque testaceis; prothorace quam longiori dimidio latiori, antrorsum vix angustato, antice posticeque bisinuato, lateribus modice rotundatis, angulis obtusis; scutello punctulato; elytris utrinque juxta scutellum subgibbosis, leviter subtilius sat crebre punctulatis, antice et latera versus transversim rugatis, et ibi magis crasse punctulatis; femoribus anticis dente parvo armatis, posticis muticis.

Mas. Tarsorum anteriorum 4 articulo basali sat dilatato; tibiis posticis apice manifeste nec fortiter incurvis; abdomine setis longis erectis vestito, segmento basali in medio planato permitido lævigato. Long., 2 l.; lat., 1 l.

This species appears to be intermediate between Dr. Chapuis' sub-genera *Edusina* and *Edusella*, the posterior tibiæ in the male having their apex very briefly but quite distinctly bent inwards, the process, however, being so short that it might easily be passed over without notice. The tooth on the front femora is scarcely larger than in *E. suaveola*, Germ.

Victoria; sent to me by C. French, Esq

*E. lineata*, sp. nov. Ovalis; sat parallela; pube grisea vestita, hac in elytris circiter 8-seriatim longitudinaliter læte dispositis; obscure ænea, labro antennarum pedibusque (tarsis obscurioribus) læte testaceis; cetera ut *E. ænea*.

Mas. Fere ut *E. ænea*, sed tibiis posticis apice nullo modo incurvis. Long.,  $2\frac{1}{3}$  l.; lat., 1 l.

This species is remarkably like the preceding. It scarcely differs from it, except in the colouring—the legs (except the

tarsi) being clear testaceous, and the elytra much more conspicuously striped with pale grey—and in the hind tibiæ of the male being straight. I have seen eight specimens of this species (of both sexes), and two males of the former, and the differences seem quite constant. I do not think that they can be regarded otherwise than as two good species. Dr. Chapuis' arrangement of *Edusa* would place them in distinct sub-genera.

I have before me two female examples scarcely differing from this species except in being of a bright rosy colour with legs entirely testaceous and having the basal part of the elytra more distinctly rugulose. In the absence of the male, I am at a loss to determine whether they represent a distinct species.

Victoria; Alpine district.

*E. lata*, sp. nov. Ovals; pilis griseis æqualiter sat dense vestita; capite prothoraceque opacis coriaceis obsolete sparsim punctulatis, illo (scutelloque) læte viridibus, hoc aureo-brunneo certo adspectu viridi-micanti; elytris sat nitidis aureo-brunneis subcupreo-micantibus, corpore subtus viridi, abdomine aureo-micanti, labro antennis palpis pedibusque læte testaceis; prothorace quam longiori vix dimidio latiori, in medio longitudinaliter obsolete carinato, antrorsum parum angustato, antice bisinuato in medio sat producto, lateribus leviter arcuatis, basi leviter bisinuata, angulis obtusis; scutello punctulato; elytris leviter subtilius sat crebre punctulatis subhumeris vix transversim rugatis, puncturis basin versus et ad latera crassioribus; femoribus anticis dente magno armatis, posticis muticis.

Mas. Tarsorum anteriorum 4 articulo basali modice dilatato; tibiis posticis apice haud incurvis abdomine in medio setis longis erectis vestito, segmento basali in medio planato pernitido fere lævigato. Long.,  $2\frac{1}{5}$  l. (vix); lat., 1 l.

This species bears much resemblance to *E. suaveola*, Germ., from which, however, it may be at once distinguished by the much larger tooth of the anterior femora.

Victoria; Alpine district.

*E. bella*, spec. nov. Ovals; sat parallela; pube aurea subtili æqualiter sat dense vestita; supra omnino læte prasina subtus viridis, abdomine aureo-micanti; labro palpis antennis pedibusque testaceis; capite prothoraceque opacis coriaceis obsolete sparsim punctulatis; prothorace fere ut *E. lætæ* sed haud carinato, antice in medio parum producto; scutello punctulato; elytris femoribusque fere ut *E. lætæ*, sed femorum anticorum dente minori.

Mas. Tarsorum anteriorum 4 articulo basali modice dilatato; tibiis posticis apice haud incurvis; abdomine in medio setis

longis erectis vestito, segmento basali in medio vix planato.  
Long.,  $1\frac{1}{3}$  l.; lat., 1 l. (vix).

This species (of which I have both sexes) might almost pass for a small differently coloured form of *E. lata*, but on careful examination I am convinced that it is really distinct, the prothorax having its front margin evidently less produced in the middle, and being quite devoid of the faint carina which runs down the middle in the latter; the basal ventral segment in the male, moreover, is much less levigate.

Victoria; Alpine district.

*E. glauca*, sp. nov. Sat breviter ovalis; sat nitida; pube supra aurea subtus grisea sat dense vestita; supra sat pallide viridis vix aureo micans, subtus magis ænea, labro palpis antennis pedibusque testaceis; capite prothoraceque subcoriaceis leviter minus crebre punctulatis; hoc quam longiori dimidio latiori, antrorsum vix angustato, antice fortiter bisinuato in medio late fortiter producto, lateribus fere rectis, basi bisinuata, angulis obtusis; scutello punctulato; elytris crebre subtiliter punctulatis, latera versus paullo magis fortiter punctulatis et vix transversim rugatis; femoribus anticis dente mediocri armatis, posticis muticis.

Mas. Tarsorum anteriorum 4 articulo basali parum dilatato; tibiis posticis apice haud incurvis; abdomine in medio setis paucis longis erectis vestito, segmento basali in medio planato nitido fere levigato. Long.,  $1\frac{1}{3}$ —2 l.; lat.,  $1-1\frac{1}{5}$  l. (vix).

Of a paler, more "dead" green colour than *E. bella*, otherwise closely resembling it in colour, but at once distinguishable by much finer puncturation of the elytra and the much more distinct puncturation of the prothorax. The tooth on the anterior femora is very evidently larger than in *E. suaveola*, Germ.

S. Australia; not uncommon on flowers near Port Lincoln.

*E. pilifera*, sp. nov. Breviter ovalis; sat nitida; pilis griseis brevibus æqualiter sat dense vestita, nonnullis in elytris intermixtis multo longioribus erectis nigricantibus; rosea-metallica, subtus obscure ænea, labro antennis palpis pedibusque rufo-testaceis; capite prothoraceque distincte leviter sat sparsim punctulatis, hoc quam longiori fere duplo latiori, antrorsum vix angustato, antice fere truncato, basi rotundata, lateribus leviter arcuatis, angulis obtusis; scutello punctulato; elytris leviter minus subtiliter sat crebre punctulatis, sus humeris sat fortiter transversim rugatis et ibi crasse fortiter punctulatis; femoribus anticis dente parvo armatis, posticis muticis.

Mas latet. Long.,  $1\frac{1}{3}$  l.; lat., 1 l.

A very distinct species, much shorter and wider than any of

the preceding, and with coarser puncturation; the erect long hairs on its elytra are also a good character. The tooth on the anterior femora is not much larger than in *E. suaveola*, Germ.

Victoria; Alpine district.

*E. fraterna*, sp. nov. Ovalis; sat nitida; pilis albidis et nonnullis elongatis erectis fulvis, confuse vestita; obscure aenea, labro palpis antennis (harum articulo basali supra et ultimis ad apicem obscurioribus) femorum basi tibiisque testaceis; capite prothoraceque crebre sat fortiter punctulatis; hoc quam longiori vix dimidio latiori, antrorsum parum angustato, antice in medio late sat fortiter producto, lateribus sat fortiter rotundatis, basi vix bisinuata, angulis rotundato-obtusis; scutello punctulato; elytris sat fortiter rugosule punctulatis, apicem versus substriatis, pone humeros fortiter transversim rugatis; femoribus anticis dente sat magno armatis, posticis muticis.

Mas. Tarsorum anticorum articulo basali modice (intermediorum vix manifeste) dilatato; tibiis posticis apice haud incurvis; segmento 1° ventrali in medio pernitido lævigato. Long., 2 l.; lat., 1 l.

Resembles *E. perplexa* in colour and build, but *inter alia* is very much more coarsely punctured, and the hind tibiæ of the male are not at all incurved at the apex.

Victoria; Alpine district.

*E. hirta*, sp. nov. Breviter ovalis; sat nitida; densissime aequaliter griseo-pubescentis; supra roseo-cuprea, subtus aenea, clypeo viridi, labro palpis antennis pedibusque (horum, nonnullis exemplis, femoribus tibiisque apice plus minus infuscatis) testaceis; capite prothoraceque subcoriaceis obsolete punctulatis; hoc quam longiori fere duplo latiori, antrorsum parum angustato, antice profunde bisinuato, in medio late fortiter producto, lateribus leviter arcuatis, basi leviter bicinuata, angulis anticis productis sat acutis, posticis obtusis; scutello punctulato; elytris substriatis, crebre minus fortiter (latera versus magis fortiter) punctulatis, sub humeros obscure transversim rugatis; femoribus anticis dente sat magno, posticis sat parvo, armatis.

Mas. Tarsorum anticorum articulo basali sat fortiter (intermediorum vix manifeste) dilatato; tibiis posticis apice haud incurvis; segmento 1° ventrali in medio paullo minus crebre punctulato. Long.,  $1\frac{1}{2}$ —2 l.; lat.,  $\frac{4}{5}$ —1 l.

The dense grey pubescence under which the sculpture and colouring is buried will distinguish this species from all known to me of its congeners.

S. Australia; Yorke's Peninsula.

*E. pavens*, sp. nov. Sat breviter ovalis; sat nitida; pilis griseis brevibus æqualiter sat dense vestita, nonnullis intermixtis longioribus erectis nigricantibus; ænea, labro palpis antennis pedibusque testaceis; capite prothoraceque sat subtiliter sat crebre punctulatis; hoc quam longiori circiter dimidio latiori, antrorsum haud angustato, antice in medio late valde producto, basi manifeste bisinuata, lateribus subdeplanatis fortiter rotundatis, angulis anticis fere rotundatis posticis obtusis; scutello punctulato; elytris subfortiter punctulatis et transversim rugatis; femoribus anticis late angulatis vix dentatis, posticis muticis; antennis minus elongatis apicem versus subincrassatis.

Mas. Latet. Long.,  $1\frac{1}{2}$  l.; lat.,  $\frac{2}{3}$  l. (vix).

This little species resembles *E. fraterna* in the stiffish erect bristles with which it is clothed, and also resembles *E. Meyricki* (vide infra) in general appearance and its antennal structure, but differs widely from both *inter alia* in the shape of its prothorax, and from the latter in its much coarser sculpture.

W. Australia; taken by E. Meyrick, Esq.

*E. Meyricki*, sp. nov. Sat breviter ovalis; sat nitida; sat æqualiter sat dense griseo-pubescentis; ænea subcuprascens, labro palpis antennis (articulo 1° supra et ultimis apicem versus exceptis) pedibusque testaceis; capite prothoraceque subcoriaceis et leviter sat sparsim punctulatis; hoc quam longiori dimidio latiori, antrorsum sat angustato, antice leviter bisinuato in medio late sat fortiter producto, lateribus modice rotundatis, basi leviter bisinuata, angulis anticis fere acutis posticis rectis; scutello punctulato; elytris leviter vix crebre (latera versus paullo crassius et hic obscure transversim rugatis) punctulatis, femoribus anticis late angulatis vix dentatis, posticis muticis; antennis minus elongatis apicem versus subincrassatis.

Mas. Tarsorum anteriorum 4 articulo basali fortiter dilatato; tibiis posticis apice haud incurvis; segmento ventrali basali in medio subplanato sublævi. Long.,  $1\frac{2}{3}$  l.; lat., 1 l.

The whitish grey pubescence on the elytra is here and there condensed into a somewhat conspicuous patch or tuft, but it is possible that this may be due to the rest of the surface being a little abraded in my unique example. The antennæ shorter than usual in the genus, and having the apical joints a little incrassated furnish a very noticeable character.

W. Australia; taken by E. Meyrick, Esq.

*E. inermis*, sp. nov. Ovalis; nitida; pube aureo-fulva sat æqualiter sat dense vestita; viridi-metallica, labro palpis antennis pedibusque testaceis; capite prothoraceque fortius

minus crebre punctulatis ; hoc quam longiori circiter dimidio latiori, antrorsum vix angustato, margine antico vix sinuato antrorsum producto, basi vix bisinuata, lateribus sat fortiter rotundatis, angulis anticis fere rectis posticis obtusis ; scutello punctulato ; elytris sat fortiter sat crebre punctulatis, antice latera versus subcrasse rugatis ; femoribus muticis ; antennis quam corpus sat brevioribus.

Maris tarsorum anteriorum 4 articulo basali modice dilatato ; tibiis posticis apice haud incurvis ; abdomine setis longis erectis vestito ; segmento basali in medio subplanato pernitido sublævi obscure transversim rugato. Long.,  $1\frac{2}{5}$  l. ; lat.,  $\frac{4}{5}$  l.

The sculpture of the elytra is much like that of *E. pavens*, but the prothorax is much more strongly and less closely punctulate. This species also probably resembles *E. evanescens*, Boh., but the latter appears to be a considerably smaller insect still, with the clypeus yellow, the head opaque, and the antennæ as long as the body.

S. Australia ; a single example in the S. Australian Museum, *E. glabra*, sp. nov. Breviter ovalis, lata ; glabra ; colore variatilis, viridis vel purpurea, labro palpis antennis pedibusque (horum trochanteribus nigris) testaceis ; capite prothoraceque subtiliter (hoc ad latera, fortius) minus crebre punctulatis ; hoc quam longiori fere duplo latiori, antrorsum angustato, antice fortiter bisinuato, basi fortiter bisinuata, lateribus leviter arcuatis, angulis anticis acutis posticis obtusis ; scutello vix punctulato ; elytris sat fortiter subseriatim (seriebus subgeminatis) punctulatis, apicem versus substriatis, vix transversim rugatis ; femoribus anticis dente parvo armatis, posticis muticis ; tibiis extus obscure longitudinaliter canaliculatis ; antennis quam corporis dimidium sat longioribus.

Mas. Tarsorum anteriorum 4 articulo basali fortiter dilato ; tibiis posticis haud apice incurvis ; abdomine (exempli masculi unici) fracto. Long.,  $1\frac{1}{2}$ — $1\frac{4}{5}$  l. ; lat.,  $\frac{4}{5}$ — $1\frac{1}{5}$  l. (vix).

This species presents several of the distinctive characters attributed to *Cleptor*, but its dentate anterior femora and antennæ—quite two-thirds the length of the whole body—forbid its being placed in that genus.

*E. singularis*, sp. nov. Ovalis ; nitida ; glabra ; colore variabilis (ænea vel violacea vel cuprea), antennarum palporumque basi pedibusque rufo-brunneis ; capite fortiter confuse vix crebre punctulato ; prothorace quam longiori fere duplo latiori, antrorsum sat angustato, antice bisinuato in medio late sat fortiter producto, crasse rugulose minus crebre

punctulato, lateribus fortiter rotundatis tridentatis, basi bisinuata, angulis anticis spiniformibus posticis breviter dentatis; scutello lævi; elytris fortiter punctulatis, postice striatis minus fortiter punctulatis, latera versus transversim valde rugatis; femoribus anticis dente parvo armatis, posticis muticis; tibiis extus canaliculatis.

Mas. Tarsorum anteriorum 4 articulo basali valde dilatato; tibiis posticis haud apice incurvis; abdomine setis longis erectis vestito, segmento basali in medio planato, penultimo in medio lævigato pernitido, ultimo fossa profunda instructo. Long., 3 l.; lat.,  $1\frac{1}{2}$  l.

A remarkable insect, with no near ally among described species; it might perhaps be regarded as the type of a new genus. In some of its characters it agrees with *Cleptor*.

Victoria; Alpine district.

### COCCINELLIDÆ.

#### ORCUS.

*O. cœlestis*, sp. nov. Sat fortiter convexus; sat nitidus; supra cœruleus, viridi violaceoque micans; subtus niger—antennis, tarsis, tibiis anticis et abdomine testaceis; capite sparsim subtiliter, prothorace subtiliter minus sparsim, elytris sat crebre subfortiter, punctulatis. Long.,  $1\frac{4}{5}$  l.; lat.,  $1\frac{3}{5}$  l. (vix).

A very pretty species, resembling in colour *O. cyanocephalus*, Muls., and *chalybeus*, Boisd., but scarcely so convex as either of those insects, and much more strongly and closely punctured than either of them, or than *O. Australasiæ*, Boisd. From *O. cyanocephalus* it differs also in the colour of the legs, and from *O. chalybeus* in the more strongly rounded sides of the prothorax. *O. Lafertei*, Muls., I have not seen, but it appears to be a larger insect, of somewhat similar colour, but having some conspicuous violet spots symmetrically arranged on the prothorax.

N. Territory of S. Australia.